

Topic-strategies and the internal structure of nominal arguments in Greek and Italian*

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Abstract

In this paper we argue that a set of unexpected contrasts in the interpretation of Clitic Left Dislocated (CLLD-ed) indefinites in Italian and Greek derive from structural variation in the nominal syntax of the two languages. Greek resists non-referential indefinites in CLLD resorting to the Topicalisation of an often bare noun for non-referential topics. By contrast, CLLD is employed in Italian for topics irrespective of their definite/indefinite interpretation. We argue that this contrast is directly linked to the wide availability of bare nouns in Greek which stems from a structural difference in nominal syntax of the two languages. In particular, we hypothesise that Greek nominal arguments lack a D-layer. Rather, they are Number Phrases. We situate this analysis in the context of Chierchia's typology. We argue that, on a par with Italian, Greek nouns are [-arg, +pred]. However, they do not employ a syntactic head (D) for type shifting to e. Rather, they resort to covert-typeshifting, a hypothesis that is necessary to account for the distribution and interpretations of bare nouns in Greek, vis a vis the other [-arg,+pred] languages like Italian and French.

1 Introduction

Since the early nineties the syntax of Clitic Left Dislocation (CLLD) has attracted interest in the literature on Italian and Greek because of its syntactic properties that distinguish it from wh-movement and its interaction with discourse structure (see Cinque (1990); Rizzi (1997); Anagnostopoulou (1994); Tsimpli (1995) among others). CLLD shows mixed syntactic properties in relation to movement diagnostics. It is sensitive to islands, a standard indication of movement, but does not give rise to weak crossover effects (wco) and does not license parasitic gaps (p-gaps) as wh-movement does. In this respect, it patterns with English Topicalisation which also shows these contradictory properties regarding movement. To accommodate the properties of Topicalisation within a theory of A' movement, Lasnik and Stowell (1991) postulate two types of A' operators, quantificational (Wh, QR, Focus) and anaphoric ones (Topic, Null Operator in tough-movement and Non Restrictive Relative Clauses). The crucial property of anaphoric operators like the topic operator in Topicalisation is that it does not bind a variable. Rather, topicalised phrases are linked to the in-situ element of the dependency (*a null epithet*) through co-reference. Building on Lasnik and Stowell's analysis of English Topicalisation, Rizzi (1997) and Tsimpli (1995) explicitly analyse the pronominal in Italian and Greek CLLD as an overt counterpart of the gap (null epithet) element of English Topicalisation. As in English Topicalisation, the CLLD-ed phrase is linked anaphorically to the in-situ element of the dependency (the pronominal clitic), through co-reference. Sensitivity to islands is accounted for by A-bar movement while the absence of variable binding explains the absence of weak crossover and parasitic gaps.

In this context, we generally expect CLLD-ed phrases to receive the same interpretations in Greek and Italian. Moreover, if both CLLD and Topicalisation are attested within

a language, we don't expect variation in interpretation if all that is different between the two structures is the PF realisation of the in-situ element.¹ However, despite these expectations, there are important interpretative differences between Italian and Greek CLLD that point to the need for a more refined analysis of the variation between the two languages. These contrasts are the starting point of our investigation.

The key difference concerns the interpretation of CLLD-ed indefinites. Greek CLLD-ed indefinites systematically resist a non-referential interpretation as shown in (1) (from Alexopoulou and Kolliakou 2002). Thus, (1-c), which imposes a referential interpretation of the CLLD-ed antecedent *a red skirt* in (1-a) is a felicitous continuation of (1-a). By contrast, (1-b) is not felicitous² because it imposes a non-referential interpretation of the CLLD-ed antecedent:

- (1) a. mia kokini fusta tin psahno edho ke meres
a red skirt it look-for.1SG here and days
'I've been looking for a red skirt for a few days ...'
- b. ≠ke dhe boro na vro kamia pu na m'aresi
and not can.1SG SUBJ find.1SG none that SUBJ me-please.3SG
'... and I cannot find any that I like.'
- c. ke dhe boro na thimitho pu tin eho vali
and not can.1SG SUBJ remember.1SG where her.CL have.1SG put
'... and cannot remember where I put it.'

The corresponding Italian example (2-a) is ambiguous. Both (2-b) and (2-c) are felicitous continuations of (2-a):

- (2) a. una gonna rossa la cerco da un po'
a red skirt her.CL look-for.1SG for a while
'A red skirt I've been looking for a while...'
- b. ma non ne ho trovata nessuna che mi piaccia
but not of-them.CL have.1SG found none-FEM that me please.3SG.SUBJ

‘... but have not found anyone that I like.’

- c. ma non riesco a ricordarmi dove l’ho messa
but not reach.1SG to remember where her.CL.have.1SG put
‘... but I cannot remember where I’ve put it.’

To express an indefinite topic as in (2-b), Greek resorts to Topicalisation as in (3), which characteristically involves a gap instead of a clitic (Alexopoulou and Kolliakou, 2002, ex.51):

- (3) a. Fetos i modha ine apesia; idhika i bluzes ine
 ‘I hate this year’s fashion; the blouses are especially
 aparadhektes
 outrageous.’
b. mia kokini bluza psahno edho ki ena mina ke dhe boro na
 a red blouse her.CL look.for.1SG here and one month and not can
 vro puthena kamia pu na m’aresi
 SUBJ find.1SG anywhere anyone that SUBJ me like.3SG
 ‘A red blouse I’ve been looking for for a month now and I cannot find one
 that I like.’

The above facts call for a finer analysis of variation between Greek and Italian regarding CLLD. The properties of the clitic pronominals in the two languages appear relevant since the source of the interpretative contrast in Greek is the alternation between gap and pronominal clitic.

This interpretative difference questions the analysis of the alternation between gaps and pronominal clitics as merely as a case of PF alternation. Rather, such facts indicate that the properties of the in-situ element in an anaphoric A’ chain matter. In this paper we argue that, in order to account for the interpretative variation between Greek and Italian CLLD we need to complement the existing account based on anaphoric chains with an account of the properties of the pronominal elements at the bottom of these dependencies

and, in turn, the properties of their antecedents heading the CLLD dependency. In other words, we need to complement the existing analysis of CLLD with an account of the variation of the syntax of nominals in the two languages.

Turning to the syntax of nominals in the two languages, Italian nominal arguments are standardly analysed as DPs Longobardi (1994); Giusti (1993). Since Horrocks and Stavrou (1987), Greek nominal arguments are also analysed as DPs (see also Stavrou 1991). This view remains dominant in the Greek literature to date, modulo Kolliakou's work on Greek definites Kolliakou (2003) and two proposals treating some cases of Greek bare nouns as NPs by Tomioka (2003) and Tsimpli and Papadopoulou (2005). We will depart from the dominant DP analysis of Greek nominals and argue that the key structural difference between Italian and Greek nominal syntax is the absence of a D-layer from Greek nominal arguments. We will draw extensive evidence from the distribution and properties of bare nouns in Greek and a comprehensive comparison of Greek bare and definite nouns with a range of languages in the context of the typologies proposed in Chierchia (1998b), Bošković (2008) and Bošković and Gajewski (2011). As we will show, the empirical diagnostics show that Greek does not exhibit some crucial properties of article/D languages like Italian but it also differs from languages like English and Slavic which allow bare nouns to refer to kinds. We will argue that Greek instantiates a type not previously considered theoretically: a language with predicative nouns which, nevertheless, lacks a syntactic head (D) to solve the mismatch between the semantic type of properties ($\langle e, t \rangle$) and individuals ($\langle e \rangle$). We will argue that, instead, Greek has to resort to covert type shifting for bare indefinites. We will show how our hypothesis can capture the properties of Greek nominals but also account for the interpretative possibilities of pronominals in CLLD capturing the cross linguistic variation.³

Our starting point in Section 2 is the syntactic and semantic properties of Greek bare

nouns and the critical ways in which Greek differs from Italian. In Section 3 we discuss the differences between the two languages in the context of Chierchia’s nominal mapping parameter reaching the conclusion that Greek lacks a D-layer. We consider definites in Section 4, providing a comprehensive review of Greek nominals in the context of the typological diagnostics proposed by Bošković and argue that the Greek definite article does not instantiate a D head. We return to CLLD and Topicalisation in Section 5 where we first show how CLLD mirrors various anaphoric patterns in the two languages and then discuss how the variation in the nominal syntax can help explain the crosslinguistic contrasts in anaphoric construals. Finally, we discuss the possible source of variation between Greek and Italian in section 6, before concluding in Section 7.

2 Bare Nouns in Greek

A significant difference between Italian and Greek is the wide availability of bare nouns in the latter, contrasting with their restricted availability in the former. As illustrated in (4), Greek bare nouns can be singular as well as plural:

- (4)
- a. i Maria vrike dada gia ta pedhia
the.NOM Maria found nanny for the children
‘Maria found a nanny for the children.’
 - b. bikan kleftes ke sikosan ta pada
broke.in.3PL burglars and lifted.3PL the all
‘Burglars broke in and took everything.’
 - c. dhiadhilotes pirpolisan maghazia ke aftokinita stus dhromus yiro
demonstrators set-on-fire shops and cars in-the streets around
apo to Politehnio
from the Politehnio
‘Demonstrators set on fire shops and cars in the streets around the School of Engineering.’

In Italian, by contrast, bare nouns are licensed in restricted environments with bare singulars generally being excluded Benincà (1980); Longobardi (1994); Chierchia (1998b).

Consider the Italian counterparts of Greek (4-a) and (83) below in (5):

- (5) a. Maria ha trovato una baby-sitter/*baby-sitter per i bambini
 Maria has found a nanny/*nanny for the children
 ‘Maria found a nanny for the children.’
- b. Gianni sta cercando un idraulico/*idraulico.
 Gianni is looking-for a plumber/*plumber
 ‘Gianni is looking for a plumber.’

In addition, Italian makes productive use of the bare partitive construction Chierchia (1998a) where Greek uses bare nouns both with mass and count nouns as shown in the examples below:

- (6) Del vino si è rovesciato
 of-the wine REFL PAST spill
 ‘Some wine got spilled.’ (adapted from Chierchia 1998a)
- (7) a. trehi nero apo to solina
 runs water from the pipe
 ‘Runs water from the pipe.’
- b. hithike krasi sto trapezomadilo
 was-spilled wine on-the tablecloth
 ‘Wine was spilled on the tablecloth.’
- (8) thelume kalitehnes ya-na ...
 want.1SG artists.ACC.PL to
 ‘We want artists to ...’
- (9) vogliamo degli artisti
 want.1PL of-the artists
 ‘We want artists.’

In what follows we review the properties of Greek bare nouns. First, we consider whether they should be analysed as incorporated properties or arguments and establish that they are arguments (section 2.1). We then show that Greek bare nouns are available in both subject and non-subject positions, therefore not exhibiting the structural restrictions of Italian bare nouns (section 2.2). Finally we consider their interpretations (section 2.3).

2.1 Evidence that bare nouns are not incorporated properties

Evidence from morphology, syntax and their interpretation clearly suggests that Greek bare nouns are not incorporated properties. In particular, in terms of their morphology, bare nouns are marked for case, gender and number, just like any other argument, in contrast to incorporated arguments which, crosslinguistically, may show reduced morphology Farkas and de Swarts (2003).

From the point of view of their syntactic behaviour, they can be left dislocated (10-a), undergo (focus-)movement (10-b) or be passivised (10-c) like any other argument.⁴

- (10) a. dhanio, xerume pia trapeza tha mas dhosi
 loan, know.1PL which bank will us give.3SG
 ‘A loan, we know which bank will give it to us.’
- b. GHAMO theli, ohi tsilimpurdismata
 marriage want.3SG not affairs
 ‘He’s after marriage, not affairs.’
- c. plastes taftotites ekdhothikan mono stin Katohi (ohi ston
 fake identity-cards were-issued only in-the Occupation (not in-the
 efnilio)
 civil-war)
 ‘Fake identity cards were issued only during the Occupation period (not during the Civil war).’

Importantly, bare nouns can be modified like their non-bare counterparts as illustrated

in (11):

- (11) a. agorase akrivo aftokinito
bought.3SG expensive car
'She bought an expensive car.'
- b. theli dada me ptihio
want.3SG baby-sitter with degree
'She wants a babysitter with a degree.'
- c. KALOS yatros ton exetase (min anisihis)
good.NOM doctor.NOM CLHIM examined.3SG (not worry-2SG)
'A good doctor examined him, don't worry.'

Turning to their interpretation, the literature has shown that incorporated bare singulars show number neutrality, that is, compatibility with both atomic (singular) and plural interpretations, despite their singular morphology Farkas and de Swarts (2003); Espinal (2010). Greek bare singulars are only compatible with an atomic interpretation. Thus, (12-a) denotes reading of *one* newspaper;⁵ characteristically, (12-c) is ungrammatical with the singular, exactly because the predicate necessitates a plural interpretation (compare with *stamp collector* in English).

- (12) a. dhiavase efimeridha
read.3SG newspaper
'She read a newspaper.' (*reading of one newspaper*)
- b. dhiavase efimeridhes
read.3SG newspapers
'She read newspapers.' (*reading of more than one newspapers*)
- c. mazevi *ghramatosim-o/gramatosim-a
gather.3SG stamp.SG/stamps.PL
'She collects stamps.'

Greek bare singulars cannot license plural interpretations in (13) and (14) (adapted from

Espinal 2010, ex.4a). The second sentence in (13) is infelicitous; Greek contrasts in this respect with languages like Catalan, where bare nouns with singular morphology may still license plural interpretations in contexts like (13) Espinal (2010):

- (13) psahno aftokinito; ≠ ena mikro ya tin poli ki ena fortighaki ya
 look-for.1SG car; ≠ one small for the city and one van for
 ekdhromes
 trips
 ‘I’m looking for a car. ≠ a small one for the city and a van for trips.’

Further, Greek bare nouns have atomic interpretations in contexts like (14), where their Catalan counterparts are number neutral and compatible with plural readings. For instance, (14-a) cannot be followed by a continuation like *but the kids picked them* where the pronoun *them* needs a plural antecedent. Similarly (14-b) cannot be followed by a continuation like *the police checked them*. Finally, (14-c) cannot mean I am a *car collector*.⁶

- (14) a. i amigdhalia evgale luludhi
 the.NOM almond-tree made.3SG flower
 ‘The almond tree had a flower.’
 b. eho loghariasmo stin ethniki
 have.1SG account in-the national
 ‘I have an account in the National Bank.’
 c. eho aftokinitio
 have.1SG car
 ‘I have a car.’

Espinal (2010) further notes that bare singulars in Catalan are restricted to cases where the predicate (verb+bare singular) denotes a characterising property of the subject. This assumption explains the contrast between (15-a) and (15-b) (from Espinal 2010, ex.18).

(15-a) involves a characterising property of the external argument, that of being a car-owner, while (15-b) does not. Building on Espinal and McNally (2007), Espinal (2010) assumes that only ‘have’-predicates are compatible with these characterising interpretations. Example (15-b), then, is bad because it cannot be analysed as a ‘have’ predicate:

- (15) a. Tengo choche
 have car
 ‘I have a car.’ (It could be one or more than one; I am a car-owner).
- b. ≠Limpio choche
 clean car
 ‘I’m cleaning a car.’

Greek examples like (15-a) can certainly be interpreted as providing a characterising property of the subject. However, bare singulars can appear as objects of a wider range of verbal predicates as we have shown in the examples in (4-a)&(8). Moreover, in examples like (11-c) the bare noun is a subject, but nevertheless, the predicate does not denote a characterising property of the subject.⁷ Further note that while (16-b) is not felicitous in the minimal context of (16-a), a similar expression is fine in (17):

- (16) a. ti kanis?
 what doing.2PL
 ‘What are you doing?’
- b. ≠?katharizo aftokinito
 clean.1SG car
 ‘I am cleaning a car.’
- (17) a. A:pu vriskete o Yanis
 A:where is.3SG the.NOM Yanis.NOM
 ‘Where is Yanis?’
- b. B:katharizi eklisia; katalavenis; tha ton dhume se kamia vdomada
 B:clean.3SG church; understand.2SG; will him see.1PL in a week

pali
again
'He's cleaning a church. You know; we won't see him for a week.'

Suppose that speaker B owns a company which takes on cleaning of public buildings such as schools, churches and gyms. Assuming shared knowledge between A and B that cleaning a church is the most difficult and time consuming of these jobs, B's reply is natural, since 'cleaning a church' is a predicate that is implicitly contrasted with 'cleaning a gym or school'. Note that these are not characterising predicates in Espinal's sense, because they do not mean that Yanis is a 'church cleaner'.

Additional evidence that Greek bare nouns are arguments comes from the type of adjectives that can modify them. Bare singulars in Catalan can combine with classifying modifiers as in (18-a) but resist qualitative and descriptive adjectives as in (18-b) and (18-c) (from Espinal 2010, ex.8,9). *Llarga*, *escocesa* and *de quadres* denote a sub-type of skirt while *alta* in (18-c) can only modify individual entities:

- (18) a. Per a aquest espectacle necessitareu faldilla llarga/escocesa/ de quadres
for to this event need.FUT skirt long/kilt/plaid
'For this event you will need a long skirt/a kilt/ a plaid skirt.'
- b. *Necessiten faldilla feta a Singapur/neta
need skirt made in Singapore/clean
- c. *Té parella alta/malalta
has parner tall/ill

In contrast, Greek bare singulars can denote individuals, as indicated by the availability of the descriptive and qualitative adjectives in (19-b) and (19-c):

- (19) a. tha hriastite makria/skotzesiki/plise fusta
will need.2PL long/scotish/plaid skirt
'You will need a long skirt/a kilt/a plaid skirt.'

- b. tha hriastite fusta rameni stin Indhia/kathari fusta
 will need.2PL skirt sewn in-the India/clean skirt
 ‘You will need a skirt sewn in India/ a clean skirt.’
- c. ehi arosto pedhi/ehi psilo gomeno
 has ill child/has tall boyfriend
 ‘She has an ill child/a tall boyfriend.’

To summarise, the evidence reviewed in this section comes from the morphological make up of bare nouns, the possibility to be dislocated as ordinary arguments, to be modified by adjectives and to accept both qualitative and descriptive adjectives. Finally, the atomic interpretation of bare singulars is evidence for their argumenthood. All these facts point to the conclusion that Greek bare nouns denote individuals. They can be arguments and cannot be analysed as (incorporated) properties. This is a conclusion also reached independently by Lazaridou-Chatzigoga and Alexandropoulou (2013) based on a corpus investigation of Greek bare singulars in the *Hellenic National Corpus*.

2.2 Greek bare nouns in subject positions

We now turn to the syntactic environments licensing bare nouns in Greek. The first critical question is whether Greek bare nouns can appear in subject position. This is the position from which bare nouns are generally barred from in Italian. Chierchia (1998b) captured this by stating that licensing of bare nouns is dependent on government by a lexical head, and, therefore, is limited to objects in Italian.⁸ One important difference between Italian and Greek is that subjects surfacing pre-verbally, for instance, in a surface SVO structure, have in fact undergone movement as topics or foci to a left peripheral position Philippaki-Warburton (1985); Alexiadou and Anagnostopoulou (1998); Tsimpli (1995); Roussou and Tsimpli (2006).⁹ Since early analyses of Greek clause structure Philippaki-Warburton (1985), VSO is derived from an underlying SVO after V-to-T raising. Following V-to-

T movement, the subject can then move to a left peripheral position as topic or focus. Thus, we need to evaluate the availability of bare nouns subjects in the various possible positions Greek subjects can appear in. We first test their availability in their canonical post verbal position. As shown in the examples below in (20), bare nouns are acceptable in the canonical post verbal subject positions:¹⁰

- (20) a. bikan kleftes ke sikosan ta pada
broke.in.3PL burglars and lifted.3PL the all
'Burglars broke in and took everything.'
- b. efaghan mirmigjia ta melomakarona
ate.3PL ants the honeycookies
'Ants ate the honey cookies.'
- c. ton exetase ofthalmiatros ke tu ipe oti
him.CL examined.3SG eye-doctor and him.CL.GEN said.2SG that
hriazete yalia
need.3SG glasses
'(An) ophthalmiatrist examined him and told him that he needs glasses.'
- d. emfanistikan alepudhes sta horia tu kabu
appeared.3PL foxes at-the villages theCL.GEN lawlands
'Foxes appeared around the villages of the lawlands.'
- (21) a. efaye podikos to kalodhio
ate.3SG mouse the wire
'A mouse ate the wire (the wire has been eaten by mouse).'
- b. eki pu kimotan eklepsan perastiki ton Petro
there that was-sleeping.3SG stole.3PL passers-by the.ACC Petros.ACC
'As he was sleeping passers-by stole Petros.'
- c. epitelus! bike pelatis sto maghazi
at-last! came-in customer in-the shop
'At-last, a customer came in the shop.'
- d. epitelus! filise yineka to Yani
at last! kissed.3SG woman the Yannis.ACC
'Finally, a woman kissed Yanis.'

As shown by Lazaridou-Chatzigoga and Alexandropoulou (2013), bare noun can be subjects of passive verbs (22) and appear in control structures as in (23) (from Lazaridou-Chatzigoga and Alexandropoulou 2013, ex.21,22).

- (22) Htes to vradhi dhothike dheksiosi stin presvia tis
yesterday the evening was-given reception at-the embassy the.GEN
Vulgharias
Bulgaria.GEN
‘Yesterday evening, there was a reception at the Bulgarian embassy.’
- (23) I sigenis tu Otsalan epsahnan ksenodhohio na tus
the relatives the.GEN Öcalan were-searching.3PL hotele SUBJ them.CL
dhehti
accept.3SG
‘Öcalan’s relatives were looking for a hotel to host them.’

Bare subjects can also appear preverbally as shown in (24). Again they can be singular or plural:¹¹

- (24) a. pedhja fonazan stin platia olo to vradhi
kids shouted-3PL at-the square whole the evening
‘Kids were shouting at the square the whole evening.’
- b. mihanakia triyirizan stin platia olo to vradhi kornarodas
motorcycles circled.3PL at-the square whole the evening beeping
‘Motorcycles were circling the square the whole evening beeping.’
- c. dheltadhes ekovan voltes sta exarhia olo to vradhi
delta-policemen cut rounds in-the Exarhia all the night
‘Policemen were going round Exarhia (neighbourhood) all night.’
- (25) a. itan enas hamos; yinekes epsahnan ta pedhja tus mes ta
was a disaster; women were-looking-for the children their in the

halasmata; pedhja kitazan yiro tus sastismena
 ruins; children were-looking around them startled
 ‘It was a mess; women were looking for their children in the ruins; children
 were looking around startled.’

- b. alepudhes irthan ke perisi
 foxes came.3PL and last-year
 ‘Foxes appeared last year as well.’
- c. karharias ehi na emfanisti s’afti tin periohi apo to 2002
 shark.NOM has SUBJ appear.3SG in-this the region since the 2002
 ‘A shark has not appeared in this area since 2002.’
- d. kleftis dhe spai tetia klidharia me tipota
 thief.NOM not break.3SG such lock with nothing
 ‘There’s no way a thief can break such a lock.’

To summarise then, subject bare nouns are free to appear in the canonical post verbal subject position and indeed preverbally, where they are standardly analysed as topics.

2.3 Interpretations of bare nouns

A dominant question regarding the analysis of bare nouns is to what extent their interpretation is equivalent to indefinites. As discussed in detail by Delfitto (2005), bare nouns cannot receive interpretations logically equivalent to their counterparts with overt determiners, an observation originally due to Carlson (1977). Consider the examples in (26) and (27) (from Delfitto 2005):

- (26) a. John didn’t see spots on the floor.
 b. Dogs were everywhere.
- (27) a. John didn’t see some spots on the floor.
 b. Some dogs were everywhere.

Example (27-a) has a wide scope reading¹² of the indefinite which is not available in (26-a). Under this wide scope reading, John may have seen many spots, but there are some which he failed to see. This wide scope reading is unavailable in (26-a) with the bare noun. Similarly, the bare plural *dogs* in (26-b) means that for every (relevant) place there was a different group of dogs. This meaning is unavailable when *some dogs* is used in (27-b). Because of such facts, bare nouns are viewed as scopally inert Carlson (1977); Chierchia (1998b); Farkas and de Swarts (2003). Despite their scopal inertia, bare nouns can be bound by adverbs of quantificational genericity like *always* or *often* in (28):

- (28) a. In this country, people are (always) friendly.
 b. When one scares them, dogs are (often) aggressive.

Scopal inertia and the binding facts in (28) have been central to the debate around treating bare nouns as kind referring expressions and in pursuing a quantificational analysis of bare nouns as indefinites. Below we consider the relevant examples from Greek to evaluate how Greek bare nouns fit the current generalisations. Unsurprisingly, Greek bare nouns exhibit the scopal inertia found in their crosslinguistic counterparts. First, on a par with the English translation, (29-a) means that in every place there were dogs, while (29-b) has the implausible meaning that the same set of dogs was omnipresent Delfitto (2005):

- (29) a. Skilia vriskodan padou/padou vriskodan skilia
 dogs were.found everywhere/ everywhere were.found dogs
 ‘Dogs were everywhere.’
 b. Merika skilia vriskodan padou
 Some dogs were.found everywhere
 ‘Some dogs were everywhere.’

Second, the bare plural cannot scope over negation in (30-a). By contrast, when the noun

is preceded by *some* (*merikes/kati*) the wide scope reading for the indefinite nominal is the preferred one in (30-b):

- (30) a. dhen idhe roghmes sto tavani
not saw.3SG cracks in-the ceiling
'She didn't see cracks in the ceiling.' *Only* $\neg > \exists$
- b. dhen idhe kati/merikes roghmes sto tavani
not saw.3SG some/some cracks in-the ceiling.
'He didn't see some/some cracks on the ceiling.' *Only* $\exists > \neg$

A similar contrast is illustrated in (31), where, again the bare noun *efimeridhes* in (31-a) cannot take scope over the universal, unlike *kati/kapies efimeridhes* in (31-b):

- (31) a. kathe episkeptis dhiavase efimeridhes
each visitor read.3SG newspapers.PL
'Each visitor read newspapers.' *Only* $\forall > \exists$
- b. kathe episkeptis dhiavase kati/kapies efimeridhes
each visitor read some/some newspapers.PL
'Each visitor read some newspaper.' $\forall > \exists$ or $\exists > \forall$

Finally, the bare plural in (32-a) (adapted from Chierchia 1998b) cannot scope over the intensional predicate *want* in (32-a), hence, only the opaque (*de dicto*) reading is available in (32-a). By contrast, (32-b) is ambiguous between an opaque and a transparent (*de re*) reading for *some policemen*:

- (32) a. i Maria theli na ghnorisi astinomikus
the Maria wants SUBJ meet policemen
'Maria wants to meet policemen.' (*only opaque*)
- b. i Maria theli na ghnorisi kapius astinomikus
the Maria wants SUBJ meet some policemen
'Maria wants to meet some policemen.'

Bare singulars also show scopal inertia. Singular indefinites preceded by *ena* and *mia* give rise to ambiguity in (33-b) and (34-b), allowing both a *transparent* or *de re* reading and an *opaque* or *de dicto* reading.¹³ On the other hand, the bare singular shows no scopal interaction:

- (33) a. i Maria theli na padrefthi Italo
the.NOM Maria want.3SG SUBJ marry.3SG Italian
‘Maria wants to marry an Italian.’ (*only opaque reading*)
- b. i Maria theli na padrefthi **enan** Italo
the.NOM Maria want.3SG SUBJ marry.3SG one.ACC Italian
‘Maria wants to marry an Italian.’ (*ambiguous*)
- (34) a. i Maria theli n’agorasi fusta tu Armani
the.NOM Maria wants SUBJ.buy.3SG skirt the.GEN Armani
‘Maria wants to buy an Armani skirt.’ *only opaque*
- b. i Maria theli n’agorasi **mia** fusta tu Armani
the.NOM Maria wants SUBJ.buy.3SG **one** skirt the.GEN Armani
‘Maria wants to buy an Armani skirt.’ *3-way ambiguous*
- (35) a. dhen idhe mia lakuva sto dhromo
not saw.3SG a hole in-the street
‘She didn’t see a hole in the street.’ $\exists > \neg$ or $? \neg > \exists$
- b. dhen idhe lakuva sto dhromo
not saw.3SG hole in-the street
‘He didn’t see a hole in the street.’ *Only $\neg > \exists$*

Greek bare nouns then are on a par with their English counterparts regarding scopal inertia. However, they differ from the English ones in that they cannot be bound by adverbs of quantificational genericity. The examples below could only receive an existential interpretation which is infelicitous, leading to unacceptability:

- (36) a. *sti Skotia, astinomiki ine (pada) filiki
in Scotland, policemen are (always) friendly

‘In Scotland, policemen are always friendly.’

- b. *an ta fovisis, skilia (sinithos) epitithede/ine epithetika
if them scare.3SG, dogs (usually) attach/are aggressive

As we will discuss in more detail in section 3, the unavailability of binding in the examples above argues against the presence of a (null) operator in the bare noun.

Let us turn to analyses of scopal inertia. In the literature on English bare nouns, scopal inertia and kind reference have been linked to an analysis treating bare nouns as distinct from indefinites. For example, according to Carlson (1977) bare nouns map directly to arguments and denote kinds. Kinds are names, and, as such, they do not interact with semantic operators scopally. Chierchia (1998b) builds on the view of bare plurals as kinds, but offers a different analysis where scope shifting operations are constrained by economy and, hence, do not apply unless they produce alternative interpretations. Scope shifting operations leave behind traces that should be of the same type of the moved constituents. Therefore, kind denoting nominals would leave behind kind-level traces leading to identical interpretations in both moved and in-situ cases. As a consequence of economy, we do not expect movement that will lead to identical interpretations, hence no scopal interaction will arise with kinds.¹⁴ In a nutshell, scopal inertia is a consequence of kind reference.

Turning to Greek, the scopal inertia of Greek bare nouns cannot be due to kind reference because, unlike English, Greek bare nouns cannot refer to established kinds. This is shown in the unavailability of bare nouns with predicates that are satisfied by established kinds as the ones below (an observation originally due to Roussou and Tsimpli (1994)):

- (37) a. i dhinosavri/*dhinosavri ehun eksafanisti
the.NOM/* \emptyset dinosaurs.NOM have.3PL disappeared
‘Dinosaurs are extinct.’ (bare nominal ungrammatical under the *kind* reading)
- b. ta skilia/*skilia ine katikidhia zoa
the/* \emptyset dogs are domestic animals
‘Dogs are domestic animals.’
- c. ?dhinosavri ehun eksafanisti
dinosaurs.NOM have.3PL disappeared
‘Dinosaurs have disappeared.’ (bare nominal possible only under the existential reading).

Summarising the available interpretations of Greek bare nouns, we have seen that bare nouns, plural and singular, show the scopal inertia typical of their counterparts in English. Unlike their English counterparts, however, they cannot be bound by adverbs of quantificational genericity nor can they refer to kinds.

3 The nominal mapping parameter and the case of Greek

The facts reviewed in the previous sections reveal a number of properties of bare nouns that set Greek aside from English, Italian, Catalan and Slavic. Greek bare nouns are arguments rather than incorporated properties. They are scopally inert like their English counterparts, but, unlike English, they cannot refer to kinds or be bound by adverbs of quantificational genericity. Given this variation, it is worth considering how Greek can be related to one dominant analysis of the cross linguistic variation of bare nouns, namely Chierchia’s proposal for a nominal mapping parameter, which has provided a typology of nominals across English, Romance and Slavic languages.

In his seminal paper on reference to kinds across languages, Chierchia (1998b) pro-

poses a semantic parameter according to which languages vary in the way their nouns may be allowed to function as arguments. Accordingly, there is variation across languages in the denotation of nominal categories: nouns may be classified by means of two features, [+/-pred] and [+/-arg]. His typology defines five types of languages, as illustrated below:

[-pred, +arg]: every (lexical) noun is mass → (1) Chinese

Mass/count languages

[+pred, +arg]: bare nouns allowed

- * no article → (2) Slavic
- * articles → (3) Germanic

[+pred, -arg]: bare arguments disallowed

- * null D → (4) Italian
- * no null D → (5) French

Languages with a count/mass distinction are [+pred] and are split in two types, those that are also [+arg] and those that are [-arg]. The former can allow their nouns to shift to kinds and be arguments directly. If a [+arg] language has no articles, then the shifting operations will always be covert. This is the case of Slavic languages. If a [+arg] language has articles, then type shifting is achieved overtly through the use of the article. Importantly, covert type shifting is a last resort. Germanic languages including English instantiate this option.

In [-arg] languages every noun is a predicate. The mismatch can be resolved through a syntactic head, typically D, so that a predicative noun is shifted to an argument. French illustrates such a language where no bare nouns are allowed. However, a [+pred,-arg] language may also have a phonetically null syntactic argumentiser δ . In this type of language

bare nouns will be restricted, since null δ is licenced under certain conditions, namely government by a lexical head Rizzi (1990). Italian instantiates this possibility.

Let's then consider some relevant examples of crosslinguistic variation accounted for by this parametric approach. For example starting with the contrast between Italian and English we have seen that where English allows bare plurals as in (38), Italian necessarily involves a definite article (39-a), or some indefinite determiner (39-b) or the bare-partitive construction (39-c). According to this proposal, bare nouns in Italian involve a null δ (Longobardi 1986,1994, Chierchia 1998b), which is licensed in governed positions, as shown in the examples below adapted from Chierchia 1998b:

- (38) a. Lions are wild animals.
 b. Dogs are barking in the courtyard.
 c. Water is dripping from the faucet.
- (39) a. I leoni sono animali selvaggi
 the lions are animals wild
 'Lions are wild animals.'
- b. Alcuni cani stavano giocando nel giardino
 some dogs were playing in-the garden
 'Some dogs were playing in the garden.'
- c. Del vino si e' rovesciato
 of-the wine REFL PAST spill
 'Some wine got spilled.'

Turning to an [+arg] language without articles, Slavic languages are a case in point. Consider some key examples from Russian below (from Chierchia 1998b, ex.27) . Just like English, Russian allows bare plurals to be kinds (40-e), since [+arg] nouns can shift to kinds. Additionally, covert shifting can involve existential (\exists) and definite (ι) meanings (40-d), since there is no article (D) to block covert shifting in these cases (unlike English).

Since Slavic languages are [+arg] and, like English, have a count/mass distinction they allow bare mass nouns (40-a) (with singular morphology). Classifiers like *loaf of bread* are needed in (40-b)&(40-c). Singular bare nouns can introduce referents and can be used anaphorically as in (40-d). The first occurrence of *mal'čik* is qua indefinite and the second as an anaphoric definite. Finally, a singular bare noun can be used generically as shown in (40-f):

- (40)
- a. Ja kupil khleb (*khleby)
I bought bread (*breads)
 - b. Ja kupil 3 *(batona) khleba
I bought 3 *(loafs) of-bread
 - c. Na stole bylo neskolko *(sortov) syra
on the-table were several *(types of) cheese
 - d. V Komnate byli mal'čik i devočka. Ja obratilsja k mal'čiku.
in (the)-room were (a)-boy and (a)-girl. I turned to (the)-boy
 - e. Dinosavry vymrli (*Dynosavr)
dinosaurs (are)-extinct
 - f. sobaka obyčnoe životnoe
dog common animal
'The dog is a common animal.'

Let us consider how Greek fits into this typology. Greek has a count/mass distinction and, therefore, is not a Chinese type language. Crucially, as we saw in examples (37), bare nouns cannot refer to kinds as they do in English and Slavic, a fact indicating that Greek cannot be [+arg] and, therefore, allow nouns to shift (covertly) to kinds. So Greek nouns must be [+pred,-arg]. There are two language types in this class, no-null δ French and null δ Italian. Greek cannot be a French type language since bare nouns are widely available. The alternative discussed by Chierchia is a null δ language like Italian. However, there

are a number of reasons to believe that Greek is not a null δ language. First, as we saw in section 2.2, Greek bare nouns are not restricted to lexically governed positions. They are available in non lexically governed subject positions, where a null δ cannot be licensed according to the theory.

Second, even if we assume weaker licensing conditions of null δ in Greek, as suggested by one of the reviewers, we would nevertheless expect null δ to be bound by adverbs in examples of ‘quantificational genericity’ Delfitto (2005); Longobardi (2001). But, as we saw in examples (36) such binding is impossible in Greek, making the null δ analysis problematic. In addition, Greek allows bare singulars alongside the plurals. A null δ could be stipulated for singulars, but the question arises why this option is not available in Italian.

In conclusion, Greek must be a [+pred, -arg] language, but cannot be analysed as a null δ language like Italian. Pursuing such an analysis would require significant modifications to current assumptions regarding licensing of null δ and binding in contexts of quantificational genericity.¹⁵

However, there is an alternative route. Perhaps somewhat controversially, let us assume that Greek has no D head, in other words, that even when present, the Greek article does not instantiate a D head. In the case of indefinite bare nouns, lacking a (null) D head, Greek cannot resolve the mismatch between a predicative noun and an argument position through syntax, but has to resort to covert type-shifting.¹⁶ In the existential sentence in (41), in the absence of a syntactic head, a covert operation of existential closure shifts the property denotation of the noun to an existential generalised quantifier which is an argument.

- (41) a. *exi tsuhtres/karxaria sti thalasa, min bis*
 has sea-jellies/shark in-the sea, don’t enter.2sg

‘There are sea-jellies/is shark in the sea, don’t enter.’

- b. ine astinomikos mes to spiti; dhen afinun kanena na bi
 is policeman in the house: not let.3PL anyone SUBJ enter.3SG
 ‘There is a policeman in the house: they don’t let anyone enter.’

Notice that Greek lacks an overt (indefinite) determiner like Italian *dei* as in (42), which is why it needs to resort to covert shifting.

- (42) ci sono delle meduse nel mare, non entrare in acqua
 there-are of-the sea-jellies in the sea, not enter in water

The covert shifting in (41) can apply to both singular and plural indefinites, exactly as in the corresponding cases in Slavic languages. However, Greek is a [-arg] language with articles. Since cover shifting is last resort, the article, which has the semantics of ι , has to be used to shift overtly a property noun to kinds as in (43). The crucial difference between Greek and English then is that, in the latter nouns are [+arg] and, therefore, the type shifting operations \cap (cap) and \cup (cup) that transform kinds into predicates and vice-versa are available in English, but not Greek, since only English allows nouns to be either kinds or predicates.

- (43) i dhinosavri/*dhinosavri ehun exafanisti
 the.NOM/* \emptyset dinosaurs.NOM have.3PL disappeared
 ‘Dinosaurs are extinct.’ (bare nominal ungrammatical under the *kind* reading)

As expected then the definite article has to be used as an overt shifter for the universal interpretation in (44-b), the corresponding Greek sentence of (44-a) (from (Chierchia, 1998b, ex.39)).

- (44) a. Computers route modern aeroplanes.

- b. ta sighrona aeroplana ta kathodigun ipologistes
 the modern aeroplanes them.CL route.3PL computers
 ‘Computers route modern aeroplanes.’

Turning to scopal inertia, Greek is on a par with Slavic languages like Russian in that bare indefinites do not interact scopally with quantifiers while they allow readings that are impossible for the corresponding examples with an indefinite quantifier as shown in (29), repeated in (45-a) and in (45-b) for Russian (Russian examples discussed in Dayal (2004) and Krifka (2004)).¹⁷

- (45) a. Skilia vriskodan padou/padou vriskodan skilia
 dogs were-found everywhere/ everywhere were-found dogs
 ‘Dogs were everywhere.’
- b. Sobaki byli vesde
 dog.PL was.PL everywhere
 ‘Dogs were everywhere.’

While it is not clear to us at this point how to capture the scopal inertia facts under the assumption that bare nouns involve a covert shifter, the point to highlight is that Greek behaves on a par with Slavic languages and, therefore, whatever extension of the account is needed to account for scopal inertia in these languages would carry over to Greek.

Of course, Greek has a range of indefinite modifiers like *enas*=one/a or *kapios*=some. Traditional grammars treat *enas* as an indefinite article, an analysis shown to be incorrect by Markopoulou (2000) on the basis of diachronic and synchronic evidence. We follow Giannakidou and Merchant (1997) and analyse *enas* and *kapios* as pronominal adjectives.¹⁸

In some existential contexts as (46-a), *ena* is obligatory. There are subtle interpretative differences between the examples in (46). Intuitively, *ena* is used to introduce a discourse referent that will be further talked about in the discourse. By contrast the bare noun,

just states the existence of an individual. While these subtle differences deserve further investigation, they indicate that *ena* is not equivalent to the covert shift operation and, therefore, the overt *ena* cannot block covert shifting.

- (46) a. mia fora ki enan kero itan ena aghori/*aghorī ke ena koritsi/*koritsi
 one time and one time was a boy/*boy and a girl/*girl
 ‘Once upon a time there was a boy and a girl.’
- b. prin apo 3000 hronia ipirhe liodari stin periohi tis
 before from 3000 years used-to-exist lion in-the area the.GEN
 Nemeas
 Nemea
 ‘3000 ago there existed a lion in the area of Nemea.’

Let us now consider mass nouns briefly. Greek, unlike Italian, and on a par with English, allows bare mass nouns in strictly episodic sentences like (47). But, the definite article is needed for a kind interpretation as shown in (48) (from Tsoulas 2008, Ex.19).

- (47) a. trehi nero apo to solina
 runs water from the pipe
 ‘Runs water from the pipe.’
- b. hithike krasi sto trapezomadilo
 was-spilled wine on-the tablecloth
 ‘Wine was spilled on the tablecloth.’
- (48) a. *(to) nero vrazi stus 100 vathmus
 the water boil.3SG at-the 100 degrees
- b. *(to) nero ine ighro
 the water is liquid

Essentially then, mass nouns in Greek just follow the general pattern of count nouns. When interpreted existentially they appear bare involving a covert shifter while when they are kinds type shifting happens overtly through the definite article. This sets Greek

apart from English on the one hand and Italian on the other.

We now turn to the evidence indicating that Greek articles are not instantiating a D-head.

4 Greek definites

The analysis of the definite article has been a matter of controversy in the Greek literature, not the least because it does not exhibit standard properties of a determiner head. First, the article is not in complementary distribution with demonstratives; in fact, it is obligatory with demonstratives (49). The article has, thus, been analysed as a distinct Def (Definiteness) head, selected by D (determiner) which hosts the demonstrative in an example like (49) (Androutsopoulou 1994, 1995):¹⁹

- (49) afto *Ø/to vivlio
 this the book
 ‘this book’

In addition, the article can co-exist with weak possessive pronouns that are attached to the right of nouns or adjectives Alexiadou and Stavrou (2000):

- (50) a. to vivlio mu
 the book my
 ‘my book’
 b. to palio mu aftokinito
 the old my car
 ‘my old car’

Perhaps most problematically for a head analysis of the article, Greek licenses *poly-definites* or determiner spreading structures like (51-a) along the *monadic* ones (51-b)

(see Androutsopoulou 1994; Alexiadou and Wilder 1998; Kolliakou 2003, 2004, Lekakou and Szendrői 2010 among others and Alexiadou et al. 2007 for an overview):

- (51) a. to kokino to podhilato to kenuryo
 the red the bike the new
 ‘the red new bike’
- b. to kokino kenuryo podhilato
 the red new bike
 ‘the red new bike’

Both the monadic and polydefinite structures above refer uniquely to *one* bike; thus, the polydefinite structures are not multiple definite phrases, as predicted by a head analysis of the article. To account for this, many analyses stipulate that the article can be expletive, following Androutsopoulou (1994). However, such analyses do not clarify when the article is expletive and when it is not, as pointed out by Kolliakou (2003). In addition, the evidence for the expletive properties of the article is questionable. The main argument in favour of the expletive analysis is the obligatoriness of the article with proper names as in (52):

- (52) mu aresi o Messi/*Messi ala protimo to
 me.GEN like.3SG the.NOM Messi but prefer.1SG the.ACC
 Maradona/*Maradona
 Maradona
 ‘I like Messi but I prefer Maradona.’

However, the examples below indicate that the article is not expletive even with proper names. Consider the contrast in (53) and (54). (53-a) means Messi does not have properties of Maradona, for example, he is not as good a player. Similarly, (54-a) means that Greece does not have properties of European countries, (54-b) means that the referent of Europe is not the same as the referent of Germany (there are more countries in Eu-

rope). The only difference between these minimal pairs is the definite article preceding the proper names Maradona and Evropi:

- (53) a. o Mesi dhen ine Maradona
the.NOM Messi not is Maradhona
'Messi is not a Maradona/like Maradona.'
- b. aftos dhen ine o Mesi; ine o Maradona; tus
this.NOM not is the.NOM Messi: is the.NOM Maradona; them.CL
berdhepses
mixed-up.2SG
'He is not Messi; he is Maradona; you mixed them up.'
- (54) a. i Eladha dhen ine Evropi
the-NOM Greece not is Europe
'Greece is not (like) Europe.'
- b. i Germania dhen ine i Evropi
the.NOM Germany not is the Europe
'Germany is not the whole of Europe.'

The contrast extends beyond predicative structures. Example (55-a) means that the advisor has properties of Judas (e.g. a traitor), (55-b) means that for instance the doctor-examinor has properties of a Cassandra (e.g. someone who only makes negative predictions for the future). If these proper nouns were accompanied by a definite article, they would refer to individuals:

- (55) a. ton simvulepse Iudhas
him.CL advised.3SG Judas
'He was advised by someone like Judas.'
- b. ton exetase Kasandhra
him.CL examined.3SG Cassandra
'He was examined by someone like Cassandra.'

The above examples confirm that even with proper names the use of the definite article

is not expletive. The second article is also not expletive in polydefinites. As discussed in detail by Kolliakou (2003), the second definite article contributes meaning as it restricts the range of the first one. This is the case even when proper names are involved. Thus, (56-a) presupposes more than one Christinas and the polydefinite in (56-b) picks the one with the surname Sevdali:

- (56) a. Pia hristina tha erthi;
 who.FEM.NOM Christina will come.3SG?
 ‘Which Christina will come?’
- b. i hristina i sevdali
 the.NOM Christina the.NOM Sevdali
 ‘Christina Sevdali.’

Crucially, when such restrictive modification is not possible for pragmatic reasons, the polydefinites are infelicitous as shown by (57) (from Kolliakou 2003, ex.14):

- (57) a. Taxidhepse ston plati Iriniko
 travelled.3SG in-the wide Pacific
 ‘She travelled in the wide Pacific.’
- b. ≠Taxidhepse ston Iriniko ton plati
 travelled.3SG in-the Pacific the wide

If the article can never be expletive, the analysis of the article as a determiner head is fundamentally challenged by the facts presented. In this light, it is worth considering the properties of Greek definites in the context of the typology developed by Bošković (2008) and subsequent articles where a substantial number of diagnostics are developed to ascertain the structure of Traditional Noun Phrases (TNPs) across languages.

4.1 Bošković DP/NP

Bošković puts forward a proposal on the typology of nominal arguments, considering primarily syntactic evidence Bošković (2008). In a series of papers, he argues that the contrast between article and articleless languages cannot be reduced to phonological variation, namely the overt vs covert realisation of D as argued by Longobardi (1994). This is because there are systematic contrasts in the syntax and semantics of these two typological classes which cannot be captured by variation between null and overt D Bošković (2008). Specifically, he proposes that these systematic contrasts can only be explained if articleless languages instantiate Noun Phrases rather than DPs with null Ds. This is based on a generalisation involving the following empirical diagnostics:²⁰

1. Only languages without articles may allow left-branch extraction.
2. Only languages without articles may allow adjunct extraction from TNPs.
3. Only languages without articles may allow scrambling.
4. Multiple-wh fronting languages without articles do not show superiority effects.
5. Only languages with articles may allow clitic doubling.
6. Languages without articles do not allow transitive nominals with two genitives.
7. Head-internal relatives display island sensitivity in languages without articles, but not in languages with articles.
8. Polysynthetic languages do not have articles.
9. Only languages with articles allow the majority reading of MOST.
10. Article-less languages disallow negative raising; those with articles allow it.

11. Negative constituents must be marked for focus in NP languages.
12. The negative concord reading may be absent with multiple complex negative constituents only in DP negative concord languages.
13. Inverse scope is unavailable in NP languages.
14. Radical pro-drop is possible only in NP languages.
15. Number morphology may not be obligatory in NP languages.
16. Elements undergoing focus movement are subject to a verb adjacency requirement only in DP languages.
17. Possessors may induce an exhaustivity presupposition only in DP languages.
18. Obligatory numeral classifier systems occur only in NP languages.
19. Second-position clitic systems are found only in NP languages.

In what follows, we consider how Greek behaves with regard to these generalisations (we leave Italian aside as an uncontroversially DP language).

Looking at Table 2, we can see that although Greek shares the majority of properties with DP languages, it nevertheless, patterns with NP languages with regard to two diagnostics, namely Left Branch Extraction (LBE) and adjunct extraction. These two diagnostics are key to determining whether the structure around the noun is a D head giving rise to a Phase, which, in turn, is crucial for our proposal.

Before we look at Greek in relation to these diagnostics, let us first consider Bošković's analysis of these generalisations. The key idea for generalisations (1&2) above is that D introduces a Phase which restricts the extraction possibilities. The Phase Impenetrability Condition (PIC) allows movement only out of the edge of a Phase, [Spec DP] in

this case. However, a ban on short movement (antilocality) blocks movement which does not cross at least one phrasal boundary. Thus, movement of an adjective like *expensive* to [Spec DP] is disallowed in a DP language like English as shown in (58-a). By contrast, in an NP language like Serbo Croatian movement of the adjective to the left periphery is unproblematic as illustrated in (58-b) from Bošković 2008, (ex.3-4):²¹

- (58) a. *Expensive/*That_I he saw [t_i car]
 b. Skupa/Ta_i je vidio [t_i kola] (Serbo Croatian)
 expensive/that is seen car

Bošković already noticed that Greek is more liberal with extraction possibilities than expected for a DP language.²² He adopts the view that the Greek article is not a true article, but rather an agreement marker following suggestions by Mathieu and Sitaridou (2002), therefore rendering the LBE Greek facts irrelevant for his generalisation. As mentioned above, we also argue that the Greek article is not a D element, but also believe that LBE is important in establishing the structural properties of Greek TNPs and we will, therefore, consider the LBE facts in detail below.

Starting with bare nouns, LBE is available in (59):²³

- (59) a. AKRIVO aghorase aftokinito
 expensive bought.3SG car
 ‘He bought an expensive car.’
 b. KENURJO aghorase aftokinito, ohi metahirismeno
 new bought.3SG car, not second-hand

We have already shown that Greek allows bare nouns extensively, a fact that distinguishes it from a DP language like Italian. However, it is important to consider LBE in structures with a demonstrative, since, as we have presented earlier, a demonstrative like *afto* (=this) necessarily involves the definite article, and is an obvious candidate for a D Phase. The

demonstrative *afto* in (60) can be extracted out of the nominal:

- (60) AFTO aghorase to aftokinito
this bought.3SG the car
'She bought this car.'

The crucial fact here is that the presence of the article does not affect the extraction possibilities. If, for instance, we consider a nominal involving a demonstrative and an adjective as in *afto to akrivo aftokinito* (=this the expensive car) we see in (61) that the demonstrative+article+adjective can undergo left extraction:

- (61) a. afto to AKRIVO aghorase aftokinito
this the expensive bought car
b. ke i politiki mas, afto to ELEINO ipegrapsan mnimonio...
and the politicians ours, this the wretched signed memorandum...
'And our politicians, signed this deplorable memorandum.'

Note further that the pattern is exactly the same if the nominal involves a numeral+adjective as in (62):

- (62) a. ena KALO thelo krayon
one/a good want.1SG lipstick
b. dhio KALA thelo paradhighmata
two good want.1SG examples

In sum, not only Greek allows LBE despite the fact that it has articles, but, in addition, definite and indefinite phrases behave alike. These examples show that the article is not a Phase head, hence, it does not block extraction. If we accept Bošković's analysis of the generalisation, we need to conclude that these Greek nominals have no D.

The second generalisation by Bošković is that languages without articles allow adjunct

extraction as in (63-a), while languages with articles disallow it as in (63-b):

- (63) a. *From which city_i did Peter meet girls t_i?
 b. Iz kojeg grada_i je Ivan sreo djevojke t_i (Serbo Croatian)
 From which city did Ivan meet girls?

Again, Greek nominals pattern with an articleless language like Serbo Croatian rather than English since they allow adjunct extraction as in (64):

- (64) apo pia poli ghnorise koritsia o Petros?
 from who.FEM city met.3SG girls the.NOM Petros.NOM
 ‘Petros met girls from which city?’

Note that, as shown by Horrocks and Stavrou (1987), Greek allows possessor extraction; if DPs are phases and if we follow Bošković’s argumentation, then the extraction in (65) indicates that the definite article is not a D head:²⁴

- (65) pianu martira arnithikan na exetasun tin katathesi
 who.GEN witness.GEN refused.3PL SUBJ examine.3PL the.ACC testimony
 ‘Whose witness testimony did they refuse to examine?’

The remaining diagnostics do indeed mostly suggest that Greek patterns with DP languages. Below we discuss a few diagnostics where this is not the case. Crucially, it’s worth noting that, as Bošković himself points out, his diagnostics provide correlations between DP languages and certain phenomena rather than absolute definitions. Let’s consider the remaining diagnostics in more detail.

Let us begin with the generalisation regarding double genitives, namely that languages without articles don’t allow transitive nominals with two genitive nominal arguments. The idea is that absence of a second specifier position, [Spec DP], in NP languages means

fewer landing sites. Thus, the unavailability of a second genitive (6) in NP languages follows naturally from the unavailability of a second landing site. Bošković assumes that Greek allows double genitives, presumably on the basis of examples like examples like (66-a).²⁵ However, (66-a) does not seem to involve a transitive noun as required by the generalisation. Examples with transitive nominals like (66-b) or (66-c) are ungrammatical. The contrast between the two types of examples relates to Kolliakou's generalisation that at most one individual denoting and one property denoting genitive can be associated with a noun head Kolliakou (1999). In view of the ungrammaticality of examples with transitive nouns, it is unclear if (66-a) is relevant to evaluate the diagnostic. Nevertheless, (66-a) does suggest more than one Specifier position is available, but given the availability of LBE and adjunct extraction we saw earlier, prenominal landing sites are available in the Greek noun phrase, which, however, may not necessarily be due to a D-head. This, therefore, might make this diagnostic irrelevant for establishing if Greek patterns with a DP or NP language, even if (66-a) is a relevant case.

- (66) a. to vivlio tis istorias tu Yani
the book the.GEN history.GEN the.GEN Yanis.GEN
'Yanis's history book'
- b. *i epithesi ton adarton tis polis
the attach the.GEN guerillas.GEN the.GEN city.GEN
Putative: 'the attack of the city by the guerrillas'
- c. *i axiologhisi ton apotelesmaton tis epitropis
the evaluation the.GEN results.GEN the.GEN committee.GEN
Putative: 'the committee's evaluation of the results.'

The next generalisation potentially relevant to our discussion is (14), according to which only NP languages license radical pro.drop. As indicated in Table 1, Greek is not a radical pro drop language. Notice though that while NP languages can licence radical pro

drop, this is not necessary as illustrated, for instance, by Slavic languages.²⁶

In conclusion, the diagnostics by Bošković establish that Greek patterns with DP languages in most cases, but at the same time, LBE and Adjunct Extraction indicate that there is no D-Phase blocking extraction, and, that the article itself is not a D-head, which is what is crucial for our proposal.²⁷

4.2 Definites as Number Phrases

The facts reviewed in the last two sections seem to confirm that the Greek article does not behave like a D head. A D analysis cannot explain the existence of polydefinites and the non-expletive use of the article in these structures and with proper names. In addition, definite nominals allow extraction possibilities indicating absence of a DP Phase. We will, therefore, assume that the article is not a D head, but rather a prenominal modifier.²⁸

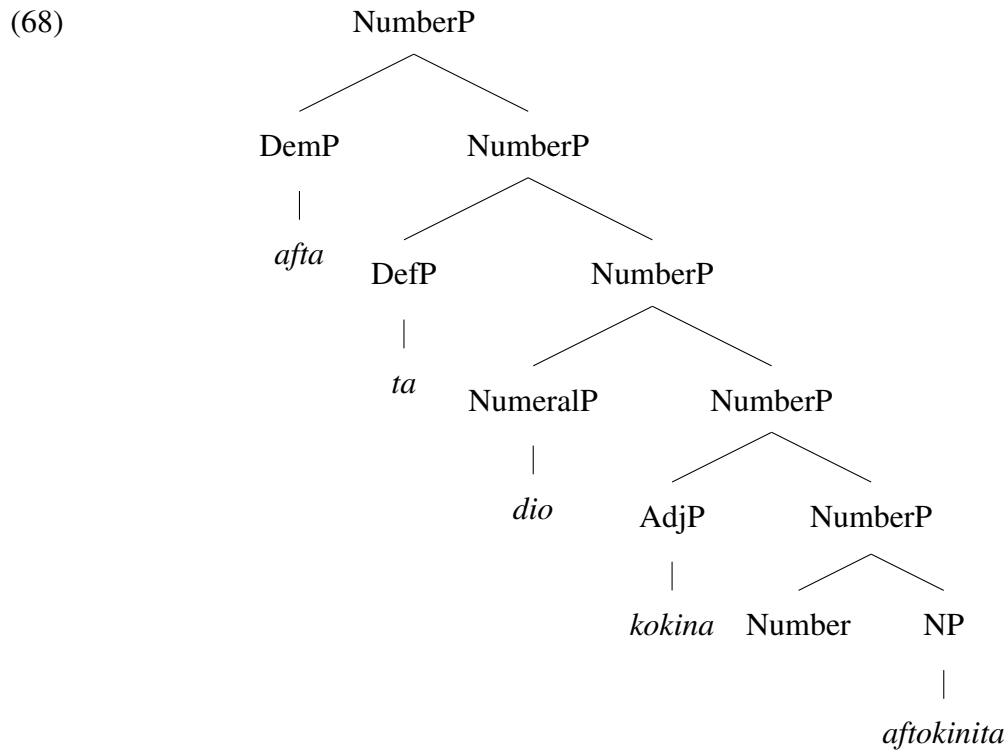
If Greek lacks a D layer, then what is the functional category heading Greek nominals? We propose that Greek nominals, definite and indefinite, involve a lower head, namely Number and are uniformly Number Phrases.²⁹ We adopt Number as the category head here as it is the only obligatory functional head above Noun Phrase. Initial support for this assumption comes from some superficial properties of number marking in Greek and Italian discussed in section 6, though, admittedly, the question of whether Number or some other functional category heads Greek nominals deserves systematic investigation. Definites then are just definite Number Phrases. Further, following Giannakidou and Merchant (1997), we assume that *ena* (one), indefinites like *kapios*= *some* and numerals are also prenominal adjectives. This analysis correctly predicts that, bar semantic anomaly, more than one of these elements may appear prenominally as in (67):

- (67) a. afto to ena aftokinito
 this the one car

‘this one car’

- b. *afta ta dhio kokina aftokinita*
 these the two red cars
 ‘these two red cars’

The structure of (67-b) is shown in (68).



The structure in (68) captures the fact that the noun can be elided from all these structures as in (69) Kolliakou (2003); Giannakidou and Merchant (1997); Giannakidou and Stavrou (1999). We see below that an adjective alone (69-a) or a numeral and an adjective (69-d) may be the only (overt) part of a NumP. The definite article is no different in (69-b) and (69-c), except for the fact that in these uses it is, descriptively, a pronoun.³⁰ In other words, the pronominal clitic involved in CLLD is an elliptical NumP:³¹⁻³²

- (69) a. tu klepsane to aftokinito ke pire kenuryo
 his.CL stole.3PL the car and bought new
 ‘His car was stolen and he bought a new one.’
- b. **ta** dhio prota vivlia ine tis Marias; fer’**ta** mu se parakalo
 the two first books are the.GEN Maria.GEN; bring them.CL you beg
 ‘The first two books belong to Maria. Bring them to me please.’
- c. aghorase kenuryo aftokinito ke to efere na to dhume
 bought.3SG new car and it.CL brought SUBJ it.CL see
- d. psahname ya kero mathimatiko ya ti dhesmi alla kataferame
 looking-for-1PL for time mathematician for the “a-levels” for quite
 ke vrikame enan exeretiko
 a bit of time, but managed.1PL and found.1PL an excellent
 ‘We were looking for a mathematician for A-levels but we managed to find
 an excellent one’ (so the time we took looking was well spent).

In Section 5 we will argue that the absence of D in Greek and the formal non-distinctness between the article and the pronoun, accounts for the contrast with Italian regarding CLLD-ed indefinites and related patterns of anaphoric construal in the two languages. Before we return to CLLD, we consider some further contrasts between the two languages that appear to be linked to the absence of a D in Greek.

As mentioned in the previous section, Greek pronouns are definite nominals in which the NumP has been elided and only the definite article remains overt. The key difference then between the Italian and Greek pronoun is that the former is a DP while the latter is a Number Phrase with a definite specifier. One important consequence of this analysis is that the definite element in Greek (article or pronoun) is optional, and, as a result, it will only appear when relevant/necessary for interpretations. By contrast, the Italian definite article and pronoun are not optional elements but realise an obligatory category, namely D, without which, Italian nouns cannot be arguments. This important categorical difference between the articles and pronominals impacts on the available interpretations

for apparently definite elements in the two languages.

Specifically, consider the observation made by Giusti (2010), that in Italian the definite article is preferred in cases like (70) where the interpretation of the head noun is indefinite:

- (70) Scommetto che non troverai mai la/?una segretaria di un onorevole che
bet.1SG that not will-find never the/a secretary of a deputy who
sia disposta a testimoniare contro di lui
can.SUBJ submit.SUBJ a testimony against of him
'I bet you'll never find the secretary of a deputy who can testify against him.'
Giusti (2010)

The definite article is banned from such environments in Greek, since it cannot head relatives rendered in subjunctive:

- (71) *den prokíte na vri ti yíneka pu na tu kani ola
not going-to.3SG SUBJ find.3SG the.ACC woman that SUBJ him.CL do.3SG all
ta hatiria
the favours
'He's not going to find the woman that will satisfy every whim of his.'

The above contrast can be understood, if, as proposed by Giusti (1993; 1997; 2002; 2010), the main role of the Italian article is that of a syntactic/grammatical morpheme acting as the nominaliser of a predicative noun, building a DP argument. By contrast, in Greek the article appears only when needed for semantic/pragmatic reasons, since it is not the head, and, as a result, it systematically receives definite/referential interpretations.

These observations and analysis bear directly on the proposal of Déchaine and Wiltschko (2002),³³ who propose that many of the distributional, binding and construal properties of pronouns can be derived from categorical differences among different pronouns. Specifically, they propose that Romance pronouns lack a D-layer and are Pro- ϕ Phrases, an assumption that allows them to function as arguments but also as predicates

as in (72).

- (72) a. Bella lo e'
beautiful it.CL is
'Beautiful she is.'
- b. belle lo sono?
beautiful it are
'Beautiful they are.'

While we share the view that the categorial status of the pronoun is crucial, the proposal does not allow us to distinguish between Greek and Italian pronouns in the relevant ways. In particular, in both Greek and Italian, the pronouns can be variables, obey Principle B and are used as arguments. They cannot but be analysed as Pro- ϕ Phrases, leaving no room for capturing the interpretative differences between the two types.

One final remark regards the standard assumption that referentiality is an intrinsic property of D Longobardi (1994); Bošković (2008). Italian examples like (73) challenge this view if, in a language like Italian, where the article is unambiguously a D, *lo* can admit non-referential readings. It is also striking that the systematic link between article/pronominals and referentiality is observed in Greek, a language where these elements resist an analysis as D-heads.

- (73) Gianni sta cercando un idraulico ma non lo trova
Gianni is looking-for a plumber but not him.CL find.3SG
'Gianni is looking-for a plumber but cannot find one.'

One reviewer brings to our attention that *un idraulico* in (73) need not be analysed as non-referential, and points to analyses like Moltmann (2013) where, in a situational semantics approach, one can assume that the indefinite *is* referential in the (relevant) situation that satisfies that predicate. While this is a possible avenue of analysis, it still

leaves unanswered why Greek pronouns cannot function in the same way.

We will now return to our original question raised in the introduction, namely why Greek resists non-referential indefinites in CLLD which are available in Italian.

5 Nominal syntax, Clitic Left Dislocation and anaphoric patterns in Italian and Greek

As mentioned in the introduction, Greek and Italian vary, rather unexpectedly, in the interpretations of indefinites available in CLLD structures the two languages. In particular, Greek CLLD-ed indefinites as in (74-a), systematically resist non-referential interpretations. The indefinite *mia kokini fusta* (*a red skirt*) is necessarily interpreted referentially as indicated by the fact that only (74-c) is a felicitous continuation of (74-a). Example (74-b) which forces the non-referential interpretation is not a felicitous continuation of (74-a).

- (74) a. *mia kokini fusta tin psahno edho ke meres*
a red skirt it look-for.1SG here and days
'I've been looking for a red skirt for a few days ...'
- b. *≠ke dhe boro na vro kamia pu na m'aresi*
and not can.1SG SUBJ find.1SG none that SUBJ me-please.3SG
'... and I cannot find any that I like.'
- c. *ke dhe boro na thimitho pu tin eho vali*
and not can.1SG SUBJ remember.1SG where her.CL have.1SG put
'... and cannot remember where I put it.'

By contrast, the corresponding Italian example in (75-a) allows both a referential and non-referential interpretation as indicated by the fact that both (75-b) and (75-c) are felicitous continuations of (75-a):

- (75) a. una gonna rossa *la* cerco da un po'
 a red skirt her.CL look-for.1SG for a while
 'A red skirt I've been looking for a while...'
- b. ma non ne ho trovata nessuna che mi piaccia
 but not of-them.CL have.1SG found none.FEM that me please.3SG.SUBJ
 '... but have not found anyone that I like.'
- c. ma non riesco a ricordarmi dove l'ho messa
 but not reach.1SG to remember where her.CL.have.1SG put
 '... but I cannot remember where I've put it.'

In the introduction we followed standard assumptions in the literature and assumed that in both languages CLLD involves an anaphoric operator, in the sense of Lasnik and Stowell (1991), to which the (in-situ) pronominal clitic is linked through coreference. We further argued that the interpretational differences shown in the examples above between Greek and Italian cannot be due to PF variation, but rather, we hypothesised that the contrast is due to the properties of the pronominal clitic in the two languages and the restrictions it poses on its antecedent. If this hypothesis is correct, then we expect the anaphoric relation between the CLLD-ed phrase and the pronominal clitic to mirror anaphoric construals outside CLLD in the two languages; in other words, we expect the Italian clitic pronominal to be compatible with non-referential interpretations outside CLLD, while the Greek one to resist non-referential antecedents. This is exactly what we saw in the last section with the Italian (73) where *lo* can pick a non-referential antecedent *idraulico* exactly as *la* allows the non-referential interpretation of *rossa* in (75-a). Similarly, the Greek example below allows only the referential reading of *enan idhravilo*, on a par with the CLLD example in (74-a).

- (76) o Yanis psahni enan idhravliko, ala dhe ton vriski puthena
 the.NOM Yanis look-for-3SG one plumber but not him find.3SG anywhere

Such parallels between CLLD and intrasentential anaphora provide confirming evidence for our hypothesis that the available interpretations in CLLD are due to the interpretational possibilities of the pronominal clitics themselves rather than variation in CLLD syntax or the properties of the anaphoric operator in CLLD.³⁴ The challenging question, though, is how to capture this type of variation regarding the compatibility or not of pronominals with non-referential antecedents. As suggested in the last section, we view such variation in pronominal interpretations as a symptom of the structural contrast between Greek and Italian nominals: as we have seen, a D head is always necessary in Italian, for turning predicative nouns into arguments. This is the case for examples like (73) even when a non-referential reading of the antecedent is intended. In the absence of an alternative D element, the clitic *lo* is used. By contrast, Greek has the option of not using a pronoun element, since according to our analysis, Greek nominals are Number Phrases and Greek can resort to covert shifting for argumenthood. Characteristically, no pronoun is used in (77), which instantiates a case of indefinite argument drop (IAD) and where *enan idhravliko* receives a non-referential interpretation.³⁵

- (77) o Yanis psahni enan idhravliko, ala dhe vriski puthena
 the.NOM Yanis look-for.3SG one plumber but not find.3SG anywhere
 ‘Yanis is looking for a plumber but cannot find one anywhere.’ *look-for* > ∃

Let us consider what we have described so far relates to analyses in the literature for CLLD.

There are potentially two alternative sources for the interpretational contrast in CLLD: the syntax of CLLD in the two languages and the properties of the anaphoric operator. Considering syntax first, the distinct interpretations could be due to scope arising from distinct syntactic derivations in the two languages. Indeed, Iatridou (1995) and Anagnostopoulou (1994) take the impossibility of interpreting CLLD-ed indefinites within the

scope of an intensional predicate like *look-for* as evidence for a base-generation analysis of Greek CLLD. Similarly, Cecchetto (2001) views the availability of the non-referential (opaque) interpretation in Italian as evidence of reconstruction, and, therefore proposes a movement analysis for Italian CLLD-ed DPs. According to these analyses then, Italian and Greek CLLD then involve distinct derivations, movement and base generation respectively. However, there is no independent evidence for this derivational contrast. In fact, in both languages the structures display many standard CLLD properties (no wco, no-parasitic gaps, sensitivity to islands, unavailability of CLLD-ed downward entailing quantifiers see Cinque 1990; Anagnostopoulou 1994; Tsimpli 1995; Rizzi 1997; Alexopoulou et al. 2004).³⁶

Turning to the properties of the anaphoric operator, various analyses link the referential interpretations of CLLD-ed phrases to their function as discourse topics, which are taken to be are only compatible with referential interpretations of indefinites Reinhart (1982); Alexopoulou and Kolliakou (2002); Endriss (2006); Philippaki-Warbuton (1985); Anagnostopoulou (1994); Tsimpli (1995); Rizzi (1997). However, the Italian CLLD-ed phrases in (75-b) challenge the view that topics are exclusively referential.

In contrast, for indefinite topics Greek resorts to Topicalisation as in (78), which characteristically involves a gap instead of a clitic (Alexopoulou and Kolliakou, 2002, ex.51).

- (78) a. Fetos i modha ine apesia; idhika i bluzes ine
 I hate this year's fashion; the blouses are especially
 aparadhektes
 outrageous.
- b. mia kokini bluz a psahno edho ki ena mina ke dhe boro na
 a red blouse her.CL look-for.1SG here and one month and not can
 vro puthena kamia pu na m'aresi
 SUBJ find.1SG anywhere anyone that SUBJ me like.3SG
 'A red blouse I've been looking for for a month now and I cannot find one

that I like.’

Unsurprisingly, Greek often involves bare nouns in Topicalisation as in (79-b), in contrast to Italian where the dislocated element cannot be bare and the pronominal clitic is obligatory.³⁷

- (79) a. Una segretaria *(la)-trovi facilmente
 A secretary her.CL.find easily
 ‘A secretary, you will find her easily.’
 b. Gramatea tha (*ti) vrite sigura
 Secretary will her.CL find.2PL certainly
 ‘A secretary you will find her certainly.’

The Topicalisation example in (80) is ambiguous, unlike its CLLD-ed counterpart. In this respect, Topicalisation shows the same ambiguity with the corresponding examples of Focus-movement in (81), an indication that Topicalisation instantiates movement which gives rise to two distinct scope readings.³⁸

- (80) enan idhravliko psahni o YANIS
 one.ACC plumber look-for.3SG the.NOM Yanis.NOM
 ‘A plumber Yanis is looking for.’ *look-for* > \exists , \exists > *look-for*

- (81) enan IDHRAVLIKO psahni o yanis
 one.ACC plumber look-for.3SG the.NOM Yanis.NOM
 ‘A plumber Yanis is looking for.’ *look-for* > \exists , \exists > *look-for*

It is worth noting that Topicalisation of indefinites as in (80) is not productive in Greek, partly due to the fact that for the opaque reading a bare noun would be preferred. Italian, on the other hand, never needs to resort to Topicalisation, since the pronominal clitic is compatible with the relevant indefinite readings.

To summarise, the interpretative contrast between Italian and Greek is due to the dif-

ferent interpretational restrictions the pronominals place on their antecedents, as they mirror intrasentential anaphora and could not be derived from either the syntax of CLLD in the two languages or the properties of the anaphoric operator. Therefore, while current analyses of CLLD are important to understand the syntax of the structure in the two languages, they cannot fully explain the contrast regarding the interpretation which turns on the properties of the clitic pronominals in the two languages, which, in turn cannot be understood outside the context of the nominal syntax in the two languages. As seen, we hypothesise that the variation in the interpretations of pronouns is the symptom of a syntactic difference between the nominal syntax in the two languages which allows the Greek pronominal to be optional where the Italian pronominal is obligatory. In the remainder of this section we provide further evidence that the CLLD facts mirror, as expected, more general anaphoric possibilities in the two languages that are due to the properties of the pronouns, drawing evidence from Indefinite Argument Drop and Bare subnominal deletion.

5.1 Anaphoric construals beyond CLLD: indefinite argument drop and subnominal deletion

As already seen, the CLLD facts mirror intrasentential anaphora: the Italian pronouns *la* and *lo* in (82) can take a non-referential antecedent just like in CLLD:

- (82) a. A: Maria ha trovato una baby sitter? B: Sì, l'ha trovata
 A: Maria has.3SG found a baby sitter? B: Yes, her.CL has.3SG found
 A: 'Has Maria found a baby sitter?' B: 'Yes, she found one.'
- b. Gianni sta cercando un idraulico ma non lo trova
 Gianni is looking-for a plumber but not him.CL find.3SG
 'Gianni is looking-for a plumber but cannot find one.'

As expected, in the Greek examples below the pronouns *ti* and *ton* are incompatible with the indefinite bare noun antecedents. The crucial contrast with Italian though is that the (object) argument is dropped in (83); the phenomenon was first observed by Dimitriadis (1994).³⁹ (See also Giannakidou and Merchant (1997), Tsimpli and Papadopoulou (2005) and Panagiotidis (2002)):

- (83) a. A:vrike dada I Maria? B:ne, (*ti) vrike
 A:found.3SG nanny the.NOM Maria A:yes, (*her) found.3SG
 ‘A:Has Maria found a nanny?’ ‘B:Yes, she found.’
- b. o Yanis psahni idhravliko alla dhe (*ton) vriski puthena
 the.nom Yanis look-for.3sg plumber but not (him) find.3sg anywhere
 ‘Yanis is looking for a plumber but cannot find one anywhere.’
- (84) A:Ha telefonato qualcuno B:Si, qualcuno ha telefonato/*Si, ha telefonato
 A:Has phoned someone? B:Yes, someone has phoned/*Yes, has phoned
 ‘A:Has anyone phoned?’ ‘B:Yes, someone has phoned.’

Another relevant case are contexts of intrasentential anaphora giving rise to the deletion of the nominal antecedent. Consider (85). In the answer, the noun *tavolo* is elided leaving the elliptical nominal *uno grande*; the elliptical nominal is headed by *uno* which consists of the indefinite article and the classifier *o*, followed by the adjective Alexiadou and Gengel (2008). Finally, the elliptical nominal is doubled by the pronoun *lo*, which in this case is non-referential.⁴⁰

- (85) A:Vorrei un tavolo grande B:Mi spiace. Non **lo** abbiamo, **uno**
 A:would-like.1sg a table big B:Me displeases.3SG. Not it have.1PL, a
grande
 big
 ‘A:I would like to buy a big table.’ ‘B:I’m sorry. We do not have a big one.’

(From Alexiadou and Gengel 2008, attributed to V.Samek-Lodovici)

Compare now (85) with its corresponding Greek example below in (86). As in Italian, the noun is elided in the answer leaving the elliptical nominal *kitrino*. However, there is no determiner or other functional material doubling the elliptical nominal. The only residue is the adjective:

- (86) a. thelo afti ti fusta se kitrino
 want.1sg this the skirt in yellow
 ‘I would like this skirt in yellow.’
- b. Distihos dhen eho kitrini. (Mono mavres mu
 unfortunately not have.1sg yellow.fem.sg (Only black..fem.pl me
 ehun mini)
 have.3pl left)
 ‘Unfortunately I don’t have a yellow one. (Only black ones are left).’

Subnominal deletion is another instance of a principled difference between Greek and Italian in the realisation of nominals.

The facts presented in this paper are summarised in Table 2 below.

INSERT TABLE 2

The key contrast between Italian and Greek in Table 1, regards the realisation of weak/non-referential indefinite nouns: Italian systematically employs articles and pronouns where Greek resorts to bare structures. As a consequence, Italian pronouns are compatible with non-referential antecedents in intrasentential anaphora or CLLD where Greek pronouns necessarily involve referential antecedents. We view this contrast as a consequence of the more basic contrast in the syntax of nominal arguments in the two languages, namely the absence of a D-layer in Greek.

5.2 Indefinite Argument Drop and Bare Subnominal Ellipsis

In this section we review previous analyses of Greek IAD and move towards integrating these facts to our proposed view of nominals in the two languages. Giannakidou and Merchant (1997) show that Greek IAD involves *recycling of the descriptive* content of the antecedent (or *property anaphora* in terms of Tomioka 2003). Crucially, the elided element does not pick the discourse referent of the antecedent.⁴¹ So, example (87-a) does not allow a reading in which *Nafsika dried the dishes Napoleodas washed*, a reading available in (87-b) where the pronoun is used. Giannakidou and Merchant (1997), thus, conclude that an empty *pro* analysis, as proposed by Dimitriadis (1994), is not tenable, since it would predict the co-referential reading in (87-b). Rather, they propose that IAD involves recycling of the descriptive content of the antecedent, that is, *pjata* (dishes):

- (87) a. o Napoleodas epline pjata ke i Nafsika
the-NOM Napoleodas.NOM washed.3SG dishes and the.NOM Nafsika
skupise
dried.SG
‘Napoleon washed dishes and Nafsika dried dishes.’ (*Disjoint reading*)
- b. o Napoleodas epline (ta) pjata_i ke i Nafsika ta_i
the.NOM Napoleodas.NOM washed the dishes and the.NOM Nafsika them
skupise
dried.3SG
‘Napoleon washed (the) dishes and Nafsika dried them.’

That these cases involve property anaphora is further confirmed by the fact that adjectives like *tetios/tetia/tetio* standardly used for concept or property anaphora (Kolliakou 2003) license argument drop:

- (88) a. vrikes teties (melitzanes)?
found.2SG such.ACC.FEM.PL (aubergines)
‘Did you find such ones/aubergines?’

- b. ne, vrika
yes, found.1SG
'Yes, I found.'

Further, Giannakidou and Merchant (1997) establish that IAD is licensed by weak indefinite quantifiers, while strong quantifiers necessitate a pronoun as shown in their examples below:

- (89) a. Efere o Adreas ola ta/ke ta dhio/ta perisotera vivila
Brought.3SG the.NOM Adreas all the/and the two/the most books
'Did Adreas bring all/both/most books?'
- b. A:Ne, *(ta) efere
A:Yes, *(them) brought.3SG
'A:Yes, he brought them.'
- (90) a. Efere o Adreas merika/kapja/liga/dheka/tulahiston
brought.3SG the.NOM Adreas several/some/a-few/ten/at-least
tria/parapano apo tria/tipota/∅ vivlia
three/more from three/any/∅ books
'Did Andreas bring several/some/a few/at least three/more than three/any/∅
books?'
- b. Ne, (*ta) efere e.
Yes, (them) brought.3SG e
'Yes he brought several/some/a few/ten/at least three/more than
three/some/∅ books.'

As shown in (89) & (90), the pronoun and IAD are in complementary distribution, depending on whether the quantifier is strong or weak.

According to our analysis, the weak indefinites in (90) are NumPs; together with Tomioka (2003), we analyse IAD as a case of NumP ellipsis.⁴² A NumP ellipsis analysis of IAD accounts for the availability of IAD with subjects in Greek—see ???. We further predict that IAD should be unavailable in Italian, since TNPs are always DPs in this

language.

One question that remains is why the whole NumP cannot be elided with definites as in (89). We believe that the reason is interpretative. Absence of definite marking gives rise to indefinite interpretations. Consider for instance (91). The answer in (91-b) involves a weak indefinite with an elided noun despite the definite antecedent; a definite is not appropriate in this case.⁴³

- (91) a. tis eferes tis valitses
 them.CL brought.2SG the.ACC suitcases
 ‘Did you bring the suitcases?’
- b. efera (kaboses); mu ehun mini tris tesoris akoma
 brought.1SG (many); me have.3PL left three four still
 ‘I brought quite a few; but still have three or four left.’

Let us now return to the examples (92), discussed earlier. These examples indicate that Greek pronouns are incompatible with a non-referential antecedent.

- (92) a. o Yanis psahni idhravliko alla dhe (*ton) vriski
 the.NOM Yanis.NOM look-for-3SG plumber but not (him) find.3SG
 puthena
 anywhere
 ‘Yanis is looking for a plumber but cannot find one anywhere.’
- b. i Maria epsahne dada ena hrono ke telika (*ti)
 the.NOM Maria was-looking-for.3SG nanny one year and finally (*her)
 vrike meso mias ghnostis
 found.3sg through an acquaintance
 ‘Maria was looking for a nanny for a year and in the end she found one through an acquaintance.’

As noted earlier and illustrated again in (93), the pronoun *can* take an indefinite antecedent (93-a), including a bare noun (93-b), as long as the antecedent is interpreted

referentially:

- (93) a. o Yanis psahni enan idhravliko, ala dhe ton vrisi
 the.NOM Yanis look-for.3SG one plumber but not him find.3SG
 puthena
 anywhere
 ‘Yanis is looking for a plumber but cannot find him anywhere.’
- b. o Napoleodas epline (ta) pjata_i ke i Nafsika ta_i
 the.NOM Napoleodas.NOM washed the dishes and the.NOM Nafsika them
 skupise
 dried.3SG
 ‘Napoleon washed (the) dishes and Nafsika dried them.’

By contrast, in Italian the clitic pronouns can admit non-referential antecedents as in (94). As argued in this paper, a key difference between the two languages is that the definite element is an optional modifier in Greek but an obligatory head in Italian. Crucially, the article could not have been omitted in the first instance in (92) if it were a D head. Similarly, a D-head is obligatory in (94). In sum, the categorical status of pronouns in the two languages impacts on their distribution (obligatory in Italian vs. optional in Greek) and, consequently on the available pronoun construals, as in the case of CLLD.⁴⁴

- (94) Gianni sta cercando un idraulico ma non lo trova
 Gianni is looking-for a plumber but cannot find one.

Turning to subnominal ellipsis, the crosslinguistic pattern in (85)&(86) follows straightforwardly from the contrast between DPs and NumPs. Despite the non-referential antecedent, Italian obligatorily requires a D element, *uno* in the elliptical structure (note that *uno grande* is doubled by *lo*). By contrast, in Greek there is just a bare adjective:⁴⁵

6 Some speculations on the crosslinguistic difference between Italian and Greek

The central claim of this study is that the variation in the topic-strategies of Greek and Italian derives from the structure of nominals. As shown, the relevant structures reflect the anaphoric possibilities in the two languages which, crucially, are governed by the structure of the relevant nominal antecedents and pronouns. However, once we move from topic-strategies and anaphoric relations to the nominals themselves, the question is whether the variation in nominals correlates with further contrasts in the two languages, or, to put the question somewhat differently, why is D the argumentisor in Italian but not in Greek? Our speculation is that the morphological and featural make up of nominal categories in the two languages plays a role in this respect. One key difference between Italian and Greek is the systematic morphological marking of nominals for number and case (in addition to gender). This contrasts with Italian nominals, which lack case, while a number of D elements lack explicit number morphological marking (e.g. *ne*, *si*). We speculate that in Greek, case, gender and number morphology provide categorical marking crucial for the identification of nominal arguments. This view again echoes Giusti's position that the primary role of the definite article as a functional head is syntactic, namely, it assigns case to its complement NP (Giusti 1993,1997; 2002).

These three features then appear to work in tandem to provide syntactic marking for a nominal argument. By contrast, in Italian D provides both the syntactic head and argumentisor. The emerging picture, if correct, would suggest that there is a trading relation between morphological marking on nominal elements and the involvement of a syntactic D head.

This picture is confirmed by some surface differences regarding number marking, be-

tween Italian and Greek. First, number marking is present in Greek in unexpected places such as mass nouns (Tsoulas (2008), Alexiadou 2010) as shown in (95) from Tsoulas 2008, (ex.9,10):

- (95) a. trehun nera apo to tavani
 drip.3PL water.PL from the.SG ceiling.SG
 ‘Water is dripping from the ceiling.’
- b. to patoma itan yemato nera
 the.SG floor.SG was full waters.PL
 ‘The floor was full of water.’

By contrast, bare singular arguments or plural mass nouns are not available in Italian. In addition, Italian seems to have at its disposal a set of clitic pronouns which do not show number morphology (*si*, *ne*) as shown in the examples below:

- (96) a. di carne ne mangia
 of meat ne eats
- b. Gianni e Maria si lavano spesso
 Gianni e Maria self wash often

Finally, Italian allows some of the number neutral singular bare nouns like Catalan as in (97):

- (97) il pero e’ in fiore
 the pear-tree is in flower
 ‘The pear tree is blossoming.’

While a systematic investigation of these facts is beyond the scope of this paper, they would point, *prima facie* to a correlation between a D head and weaker nominal morphology in relation to case and number marking.⁴⁶

7 Conclusion

CLLD has been assumed to be the main topic-strategy in Greek and Italian as seen in section 1; the topic operator assumed in these structures is linked anaphorically to the in-situ element of the A-bar dependency (rather than through binding as is the case in quantificational A-bar chains). CLLD and Topicalisation have been viewed as distinct PF realisations of topic-operator structures, with the pronominal in CLLD analysed as an overt realisation of the gap/null epithet involved in Topicalisation. We showed that the relation between the CLLD-ed phrase and the pronominal clitic mirrors general anaphoric patterns in the two languages, therefore, reinforcing the view of these structures as involving an anaphoric operator. At the same time, we showed that the syntactic category of the pronominals is crucial since it impacts on their distributions (obligatory vs. optional) and, consequently the possibilities for anaphoric construals in each language and, as a result, the range of available readings in CLLD. Crucially, the syntactic category of the pronominal has consequences for interpretation indicating that the crosslinguistic variation in the realisation of topic-operator structures is not confined to PF variation regarding the overtiness of the in-situ element. Indeed, our main claim is that the variation in topic-structures interacts with the categorical characterisation of nominal arguments in the two languages.

We focused on the realisation of indefinite topics which is where the contrast in the topic-strategies between the two languages surfaces; Italian allows (non-referential) indefinite DPs or indeed adjectives to be CLLD-ed and resumed by a clitic, while Greek CLLD is restricted to referential topics; non-referential topics are necessarily topicalised. We showed that this contrast reflects a more general pattern according to which Greek pronouns resist non-referential antecedents, where Italian pronouns systematically accept them. We argued that it is the fact that Greek nominal lack a D-layer and are instead

NumPs that is at the root of this contrast. As a modifier of a NumP, the definite article/pronoun in Greek is fundamentally an optional element, appearing only when relevant for interpretation, that is, when a referential antecedent is in the discourse. By contrast, a D pronoun is obligatory in Italian, even when the antecedent is non-specific. The category of the pronoun then affects its distribution and, therefore, impacts on the possible construals and interpretations.

The variation in the topic-strategies then is reduced to variation in the syntax of nominal arguments in the two languages. If we accept these syntactic claims, an important question arises regarding the syntax-semantics interface in Greek, namely, if D is not the argumentiser in Greek, how do nouns in this language become arguments. We argued that Greek nouns are [+pred] and [-arg] on a par with Italian. Lacking a D-head, Greek resorts to a covert shifter for existential interpretations giving rise to productive use of bare nouns, bare and singular, in both subject and object positions. This, however, is a last resort. When an overt element encodes the relevant operator, it needs to be used and block covert shifting. This is the case of the definite article, which encodes the ι operator and is necessarily implicated in kinds.

A number of questions remain open. Can we link the lack of a D-layer in Greek with the the richer morphological make up of Greek nominals and the poor inventory of D-elements which contrasts with the poorer case and number morphology of Italian nominal elements but the wider range of D elements? Which semantic account of definiteness can capture the occurrence of the definite elements in Greek, given that their occurrence is pragmatically-semantically governed?

How do the Italian facts compare with other Romance languages? Do other Romance languages allow pronouns to be construed with non-referential antecedents? Does availability of NP arguments predict IAD? While these answers await a systematic investiga-

tion, our stronger prediction is that the finer variation in the interpretative possibilities of CLLD and topicalisation structures across Romance should reflect variation in the nominal structure.

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Notes

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Syntax, February 2010, Belfast, Mediterranean Syntax, October 2010, Athens, On Linguistics Interfaces, December 2010, Belfast and Workshop on Current Issues in Semantics and Pragmatics, June 2011, York, Workshop in honor of 30 years from Doron's paper *The syntax and semantics of resumptive pronouns*, Jerusalem, 2012.

¹Indeed we don't expect differences between English Topicalisation and Italian or Greek CLLD but a comprehensive discussion of this prediction is beyond our current scope.

²We use the symbol \neq to indicate infelicity.

³A preliminary discussion and analysis of this set of facts is presented in Alexopoulou and Folli (2011).

⁴ Panagiotidis (2003) points out that a predicate like *perno tilefono* (=take phone) is ambiguous between *I get(=buy/fetch) a phone* and *make a phonecall*. Interestingly, even under the latter interpretation, where *tilefono* could be taken as semantically incorporated to the meaning of the whole predicate, the bare noun can be dislocated as in (98):

- (98) *tilefono de mpori na pari i MARINA; ine mikro pedhi*
 phonecall not can SUBJ take.3SG the.NOM Marina; is small child
 'Marina cannot make phonecall; she's only a child.'

We would like to thank Phoebos Panagiotidis for bringing this point to our attention.

⁵A reviewer raises the question whether an imperfective example as in (99) where the activity interpretation is facilitated, the singular *efimeridha* can denote an unspecified number of newspapers. Example (99) confirms the atomic interpretation for singular bare nouns on a par with (12-a):

- (99) *dhiavaze efimeridha*
 read.3SG newspaper
 'She was reading a newspaper.' (*reading of one newspaper*)

⁶With focal stress on the verb, we can get the implicature of more flowers, accounts or houses in (14). We think this is due to the fact that any indefinite interpreted existentially is true even if more than one such entities exist. In other words, the Greek examples in (14) are no different from their English translations. One reviewer wonders whether the availability of the plural vs. singular reading is related to relevance effects just like the contrast between *everyone who had a dime put it in the meter* and *everyone who had a credit card used it to pay the bill*. While relevance is at stake for understanding the interpretation of the examples above, it cannot explain the difference between Greek and Catalan in the basic cases, since we do not expect identical syntactic structures to give rise to different implicatures.

⁷See section 2.2 for bare nouns in subject positions.

⁸We take it that for our descriptive purposes the relevant notion of government is sufficiently clear and will refrain from reconstructing it in more current minimalist terms.

⁹Roussou and Tsimpli (2006) argue that there is an exception to the generalisation that preverbal subjects are either topics or foci. They argue that subjects of statives, generic subjects and subjects of middle constructions in fact appear in Spec,TP. However, this view is contested by Kotzoglou (2013). Here we will follow the more standard view in the Greek literature that preverbal subjects are not in Spec,TP.

¹⁰We assume a broad focus prosody for the examples in (20) and (21) with nuclear stress on the rightmost edge of the sentence, to avoid focal stress on the subject.

¹¹ Sioupi (2001) notes that bare nominals are excluded from subject positions as in (100). She takes such examples to indicate that there are special structural conditions licensing bare nominals, namely that the bare nominal be governed. Such structural restrictions are evidence for a null D, which, as in Italian, is not freely available, but needs to be structurally licensed. However, the preverbal position is not a subject position. The

badness of (100) is more likely due to the fact that it is not a good topic:

- (100) *pedhja efaghan to psari
children ate the fish
'Children ate the fish.' (From Sioupi 2001, ex.4a)

¹²The narrow scope reading is also available.

¹³ As pointed out to us by Sabine Iatridou, example (34-b) additionally allows a *3rd reading* according to which Maria is looking for a specific type of Armani skirt.

¹⁴Alternative analyses treating bare nouns as indefinites involving a null D as Longobardi (2001) argue that null D does not QR because it lacks lexical content which is necessary for determiners to undergo scopal movement.

¹⁵There is a superficial similarity regarding the relevant data between the two languages with respect to binding by adverbs of quantificational genericity. Examples like (101) are ungrammatical in Italian on a par with example (36). In Italian, (101) has to be excluded because null D cannot be licensed in a subject position. This explanation cannot apply for Greek which allows bare subjects:

- (101) *poliziotti sono gentili
policemen are polite

¹⁶We would like to express our gratitude to one of the reviewers for suggesting this possibility to us.

¹⁷Greek patterns with Russian also in that the corresponding singular examples are not as acceptable as the plural as shown in (102-a) for Greek and (102-b) for Russian:

- (102) a. ??skilos vriskotan padou
dog.SG was-found.SG everywhere
'There was (a) dog everywhere.'

- b. @Sobaka byla vesde
 dog.SG was.SG everywhere
 ‘A dog was everywhere.’

¹⁸These items inflect for gender, number and case and agree with their nouns in these features.

¹⁹Alternatively, the article has been viewed as agreement—Karanassios 1992, Stavrou 1996, Mathieu and Sitaridou 2002.

²⁰Diagnostics 1-10 are presented in Bošković (2008) while diagnostics 11-19 are from Bošković (2012).

²¹Bošković (2012) further refines this analysis by assuming that in NP languages the NP can be a phase blocking extraction. However, the effect of such phases is only seen in cases of ‘deep’ extraction as in (103). Movement of the adjective *pametnih* is blocked by the higher NP which is a phase. The adjective cannot move to the Specifier of that NP (from which movement would be possible) because, complements of phases cannot move as argued by Abels (2003) and shown in (104):

- (103) a. on cijeni [_{NP} [_{N'} prijatelje pametnih [_{NP} studenata]]]
 he appreciates friends smart students
 ‘He appreciates friends of smart students.’
 b. ?*Pametnih_j on cijeni [_{NP} [_{N'} prijatelje [_{NP} t_j studentata]]] (Bošković, 2012, ex.77).

- (104) ?*Ovog studenta sam pronšla [_{NP} knjigu t_j]
 this student.SGGEN am found book
 ‘Of this student I found the/a book.’ (Bošković, 2012, ex.78)

In earlier work, Bošković (2005) derives the LBE facts from the position of adjectival phrases in the DP vs. NP languages.

²²He cites Androutsopoulou (1995) and 1995.

²³All LBE examples are pragmatically marked; here we assume that at least one element of the extracted phrase bears the sentential stress as indicated by the SMALL CAPS.

²⁴Horrocks and Stavrou (1987) in fact use this type of evidence to argue for additional structure within the Greek nominal, a DP in their analysis; they link long possessor extraction as in (65) with focus movement within the nominal as in (105). They argue that *tu protu martira* in (105) moves to a position internal to the nominal exactly like the *wh*-phrase in (65) moves to CP. They take the article to be a D head allowing focus-movement to its Spec. While examples like (105) necessitate movement internal to the nominal, it is not necessary that this is to Spec,DP as we will see shortly. Crucially, this explanation can be implemented in our analysis by assuming that the possessor moves to Spec,NumP.

- (105) *arnithikan na exetasun tu PROTU martira tin katathesi*
 refused.3PL SUBJ examine.3PL the.GEN first.GEN the.ACC testimony
 ‘They refused to examine the first witness’s testimony.’

²⁵This example was suggested to us by an anonymous reviewer.

²⁶The remaining generalisations do not bear directly on whether Greek has a D head which defines a Phase. Some can be linked to the existence of a definite article in Greek (e.g. the presence of clitic doubling) whereas others are not applicable.

4 Superiority in MWL: Greek lacks multiple-*wh* questions, therefore, this diagnostic cannot be tested.

5 Clitic Doubling: Greek has Clitic Doubling (though not in Kayne’s sense).

7 Islands in HIRs: Greek does not have head internal relatives, except in the case of free relatives which are sensitive to islands, as they are in English and Italian.

8 Majority *most*: Greek *most* is *i perissoteri* (=the more), that is, it implicates the definite article and has the expected reading of *more than half*.

12 Negative Concord: Greek is a strict Negative Concord language, which, according to Giannakidou (2011) never allows the double negation reading. Thus, the relevant examples are never ambiguous in Greek, and, therefore, the question of suppressing the double negation reading does not arise. In this sense this diagnostic is not applicable to Greek. At the same time though, the *only* reading available in such examples is the Negative Concord one, exactly the reading that is available in NP languages but suppressed in DP languages.

²⁷ As mentioned earlier, Bošković himself endorses the view that the Greek article is not a D element in footnotes 3 in Bošković 2008 and 2012.

²⁸ This is just one way to capture the fact that the article is a non-D head. Alternatively the article and clitics may be viewed as agreement elements see Mathieu and Sitaridou (2002) and Mavrogiorgos (2010).

²⁹ This is not too far from Kolliakou (2003) who takes the definite to be an argument of a noun appearing at its Spec. Further, she assumes that definite and indefinite nominals are all noun phrases; in her HPSG analysis, any lexical category specified for the head feature *nom* (in turn specified for number, gender and case) can project a nominal; apart from nouns, articles, numerals and adjective share this head feature reflecting the fact that any of these categories can project a nominal argument on its own.

³⁰ For the (formal) non-distinctness of the article and pronoun systems in Greek see Roussou and Tsimpli (2006) and references therein. As the authors explain, non-distinctness does not entail identity, since the same element may appear as D or CliticP in their analysis.

³¹ Of course, a definite NumP is very different from a “red” NumP both in semantic

terms but also in PF terms, since the article/pronoun always cliticises on a host adjective/noun or verb while this is not so for the case of nominals where the only residue is an adjective, e.g. *red*. The point though is that there is no structural difference between a definite NP and any other NumP either in terms of extraction possibilities or the distribution of the article against all other pronominal elements.

³²Examples like (106), where the definite article is involved in CP nominalisation may support the view that the article *is* a head afterall. We speculate that the article contributes nominal phi-features to C but still is not heading the structure.

- (106) (to) pios tha kerdisi tis ekloyes tha eksartithi apo to pos
the who.NOM will win.3SG the.ACC elections will depend.3SG from the how
tha pai i ikonomia
will go.3SG the.NOM economy
‘Who will win the elections will depend on how things go with the economy.’

³³See also Asbury (2008) for an application of the proposal of Déchaine and Wiltschko (2002).

³⁴We will review analyses adopting these positions shortly.

³⁵It is worth noting that Italian CLLD has a wider range of pronominal clitics than Greek. For instance, in plurals, there is a choice between two pronominal clitics, namely *le* and *ne* in CLLD, depending on the definiteness of the partitive topic.

- (107) Delle-segretarie/di segretarie le/ne trovi facilmente.
of-the-secretaries/of secretaries them.CL/of-them.CL find easily
‘Secretaries, you will find them easily.’

Additionally, Italian allows CLLD of PPs (108) which is unavailable in Greek where Topicalisation is used instead (109):

(108) A Roma ci vado domani
to Rome CL.there go.1SG
'To Rome I will go (there) tomorrow.'

(109) Stin Athina pao avrio
to-the Athens go.1SG tomorrow
'To Athens I (will) go tomorrow.'

³⁶But see Haegeman (2006) for some differences.

³⁷There is some question regarding the possibility of bare plural nouns in CLLD. Thus, while (110) is ungrammatical, one of the reviewers points out that (110-b) is acceptable. As we will discuss later, Italian allows bare plurals under certain conditions Longobardi (1994) and it is therefore expected that under those conditions, such bare plurals can be CLLD-ed. The key point is that a clitic is always obligatory:

- (110) a. *Segretarie le trovi facilmente.
Secretaries them.CL.FEM find easily
'Secretaries, you will find them easily.'
- b. Libri così importanti non li ho mai letti
books that important not CL.PL have never read
'Books that important I've never read (them).'

³⁸Crucially, (80) contrasts with examples like (111) which show IAD. We will return to these examples in the next section.

(111) o Yanis psahni enan idhravliko, ala dhe vriski puthena
the.NOM Yanis look-for.3SG one plumber but not find.3SG anywhere
'Yanis is looking for a plumber but cannot find one anywhere.' *look-for* > \exists

The crucial point is that IAD forces a *de dicto* interpretation of the antecedent in (111); this contrast between IAD and Topicalisation argues against the proposal by Dimitriadis (1994) to assume that the Topicalisation example is in fact a case of *Empty Clitic Left*

Dislocation involving the same *pro* element implicated in IAD.

³⁹Dimitriadis observed the connection between IAD and Greek Topicilisation, which he refers to as Empty CLLD.

⁴⁰Belletti and Rizzi (1981) argue on the basis of the examples below where *ne* is obligatory and *uno* ungrammatical, that *ne* involves less structure than DP. However, Cardinaletti and Giusti (1990) have argued against this position and analyse *ne* as a head Q, although in their paper they do not take an explicit position on whether Q is a functional category different from D or it is the head of D:

- (112) a. ho letto un lunghissimo libro
 have.1SG read a very-long book
 ‘I have read a very long book.’
 b. ne ho letto uno/*un (lunghissimo) of.it I have read one (very-long)

⁴¹See Giannakidou and Merchant (1997) for a detailed discussion of the properties of IAD. Panagiotidis (2002) excludes a VP-ellipsis analysis of the phenomenon; his main argument is that all restrictions relevant to IAD involve the nominal antecedent and never any verbal element. Further, examples like (113), where only the object is dropped but other parts of the VP are overt indicate that what is dropped is just the object:

- (113) ti mia mera vrike dhulia o Yorgos stu Zoghrafu ke to
 the one day found.3SG job the.NOM Yorgos.NOM at-the Zografu and the
 epomeno proi vrike i Maria stin Kesariani
 next morning found.3SG the.NOM Maria at-the Kesariani
 ‘One day Yorgos found a job at Zografu and the next morning Maria found one
 at Kesariani.’

⁴²The ellipsis analysis preserves the basic intuition of Giannakidou and Merchant (1997) who also propose that IAD involves NP deletion; however, they assume that the

elided NP is headed by a null D.

⁴³Some speakers do not accept (91-b) without *kamboses*. However, the point remains that the acceptability of such examples depends on interpretation.

⁴⁴It is worth noting that when the object is plural, as in (114), the plural of *le/li*, is not acceptable. Instead, the clitic *ne* is used. In addition, the plural *le* can be used if the answer is positive, but it forces a discourse transparent reading, which is not the relevant one here.

(114) a. Maria ha trovato delle aiutanti?
Maria has found of helpers?
'Has Maria found helpers?'

b. No, non ?le/ne ha trovate
No, not them.CL/ne has found
'No she has not found.'

(115) Gianni sta cercando degli aiutanti per l'ufficio ma non ?li/ne
Gianni has-been looking-for of helpers for the-office but not them.CL/ne
trova
find.3SG
'Gianni has been looking for assistants for the office but cannot find any.'

⁴⁵For a detailed discussion of subnominal deletion in Greek see Giannakidou and Stavrou (1999). The point is that such subnominal ellipsis can take place within a bare nominal in Greek.

⁴⁶A further contrast confirming the systematic involvement of D in Italian where bare nouns are used in Greek regards the generic questions below. For instance, *gli occhiali* in (116) or *l'orologio* and *la macchina* in (117) contain a definite article in Italian:

(116) A:Porti gli occhiali? B:Si, li porto
A:wear the glasses? B:Yes, them.CL wear
A:'Do you wear glasses?' B:'Yes, I do.'

- (117) a. Porti l'orologio?
 wear.2SG the watch?
 'Do you wear watch?'
 b. Guida la macchina?
 drive.3SG the machine
 'Does he drive a car?'

By contrast, the Greek counterparts of these examples involve bare nouns:

- (118) foras (*ta) yialia/ (*ti) vera/ (*ta) takunia
 wear.2SG (*the) glasses/ (*the) wedding-ring/ (*the) high-heels
 'Do you wear glasses/a wedding ring/high heels?'
 (119) odhighis aftokinito
 drive.2SG car
 'Do you/can you drive a car?'

While the above contrast confirms the general pattern of an obligatory D in Italian where Greek employs a bare noun, it is an open question why these apparently generic readings are available in these cases in Greek, while, as we've seen generics and kinds are systematically definite in Greek.

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Diagnostics	NP-languages	DP-languages	Greek
1. LBE	YES	NO	YES
2. Adjunct Extraction	YES	NO	YES
3. Scrambling	YES/NO	NO	NO
4. Superiority in MWL	NO	YES	NA
5. Clitic Doubling	NO	YES/NO	YES
6. Double genitive	NO	YES	YES/NO
7. Islands in HIRs	YES	NO	NA
8. Polysynthesis	YES	NO	NA
9. Majority most	NO	YES	YES
10. Negative Raising	NO	YES	YES
11. Obligatory focus on negative constituents	YES	NO	YES
12. Negative concord absent with CCs	NO	YES	NO/NA
13. No inverse scope	YES	NO	NO
14. Radical pro-drop	YES	NO	NO
15. Optional number morphology	YES	NO	NO
16. Adjacency in focus movement	NO	YES	YES
17. Exhaustivity for possessors	NO	YES	YES
18. Obligatory numeral classifier	YES	NO	NO
19. Second-position clitics	YES	NO	NO

Table 1: Summary of the crosslinguistic contrasts in the realisation of weak indefinites

Structure	Italian	Greek
(A) Indefinite Topics (Non-referential)	CLLD of an indefinite nominal	Indefinite or Bare nominal linked to a gap
(B) CLLD-ed indefinites	<i>non-referential</i> and <i>referential</i> available	Only <i>referential</i>
(C) Indefinite Argument Drop	Unavailable	Obligatory with (some) weak indefinites and bare nouns
(D) Bare Subnominal Ellipsis	Unavailable always a D element	May involve bare adjective

Table 2: Summary of the crosslinguistic contrasts in the realisation of weak indefinites